

# TEST DATA OF MGFS6243R3

Regulated DC Power Supply  
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| Model             |                   | MGFS6243R3   |           | Temperature 25°C           |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
|-------------------|-------------------|--|-----------|----------------------------|--|-------------------|-------------------|--|--|---------|----------|-----------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|----|---|---|---|----|---|---|---|----|---|---|---|----|---|---|---|
| Item              |                   | Input Current (by Input Voltage)   |           | Testing Circuitry Figure A |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| Object            |                   |  |           |                            |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 1.Graph           |                   | <div><div><div>—△—</div><div>Load 100%</div></div><div><div>---□---</div><div>Load 50%</div></div><div><div>-·-○-·-</div><div>Load 0%</div></div></div> <p>Note: Slanted line shows the range of the rated input voltage.</p>  |           | 2.Values                   |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
|                   |                   | <table><tr><th rowspan="2">Input Voltage [V]</th><th colspan="3">Input Current [A]</th></tr><tr><th>Load 0%</th><th>Load 50%</th><th>Load 100%</th></tr><tr><td>0.0</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>6.0</td><td>0.003</td><td>0.002</td><td>0.003</td></tr><tr><td>8.0</td><td>0.003</td><td>0.003</td><td>0.003</td></tr><tr><td>8.2</td><td>0.025</td><td>0.407</td><td>0.840</td></tr><tr><td>8.4</td><td>0.024</td><td>0.397</td><td>0.804</td></tr><tr><td>8.6</td><td>0.025</td><td>0.387</td><td>0.784</td></tr><tr><td>8.8</td><td>0.024</td><td>0.378</td><td>0.762</td></tr><tr><td>9.0</td><td>0.023</td><td>0.370</td><td>0.745</td></tr><tr><td>12.0</td><td>0.020</td><td>0.278</td><td>0.550</td></tr><tr><td>18.0</td><td>0.015</td><td>0.186</td><td>0.364</td></tr><tr><td>24.0</td><td>0.011</td><td>0.141</td><td>0.272</td></tr><tr><td>30.0</td><td>0.005</td><td>0.113</td><td>0.219</td></tr><tr><td>36.0</td><td>0.004</td><td>0.097</td><td>0.184</td></tr><tr><td>40.0</td><td>0.004</td><td>0.088</td><td>0.166</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr></table> |           |                            |  | Input Voltage [V] | Input Current [A] |  |  | Load 0% | Load 50% | Load 100% | 0.0 | 0.000 | 0.000 | 0.000 | 6.0 | 0.003 | 0.002 | 0.003 | 8.0 | 0.003 | 0.003 | 0.003 | 8.2 | 0.025 | 0.407 | 0.840 | 8.4 | 0.024 | 0.397 | 0.804 | 8.6 | 0.025 | 0.387 | 0.784 | 8.8 | 0.024 | 0.378 | 0.762 | 9.0 | 0.023 | 0.370 | 0.745 | 12.0 | 0.020 | 0.278 | 0.550 | 18.0 | 0.015 | 0.186 | 0.364 | 24.0 | 0.011 | 0.141 | 0.272 | 30.0 | 0.005 | 0.113 | 0.219 | 36.0 | 0.004 | 0.097 | 0.184 | 40.0 | 0.004 | 0.088 | 0.166 | -- | - | - | - | -- | - | - | - | -- | - | - | - | -- | - | - | - |
| Input Voltage [V] | Input Current [A] |  |           |                            |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
|                   | Load 0%           | Load 50%   | Load 100% |                            |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 0.0               | 0.000             | 0.000  | 0.000     |                            |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 6.0               | 0.003             | 0.002  | 0.003     |                            |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 8.0               | 0.003             | 0.003  | 0.003     |                            |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 8.2               | 0.025             | 0.407  | 0.840     |                            |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 8.4               | 0.024             | 0.397  | 0.804     |                            |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 8.6               | 0.025             | 0.387  | 0.784     |                            |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 8.8               | 0.024             | 0.378  | 0.762     |                            |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 9.0               | 0.023             | 0.370  | 0.745     |                            |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 12.0              | 0.020             | 0.278  | 0.550     |                            |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 18.0              | 0.015             | 0.186  | 0.364     |                            |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 24.0              | 0.011             | 0.141  | 0.272     |                            |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 30.0              | 0.005             | 0.113  | 0.219     |                            |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 36.0              | 0.004             | 0.097  | 0.184     |                            |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 40.0              | 0.004             | 0.088  | 0.166     |                            |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| --                | -                 | -  | -         |                            |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| --                | -                 | -  | -         |                            |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| --                | -                 | -  | -         |                            |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| --                | -                 | -  | -         |                            |  |                   |                   |  |  |         |          |           |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |     |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |      |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |

Model

MGFS6243R3

Item

Input Current (by Load Current)

Object

1.Graph

—△—

Input Volt.

9V

---□---

Input Volt.

12V

---\*---

Input Volt.

18V

---○---

Input Volt.

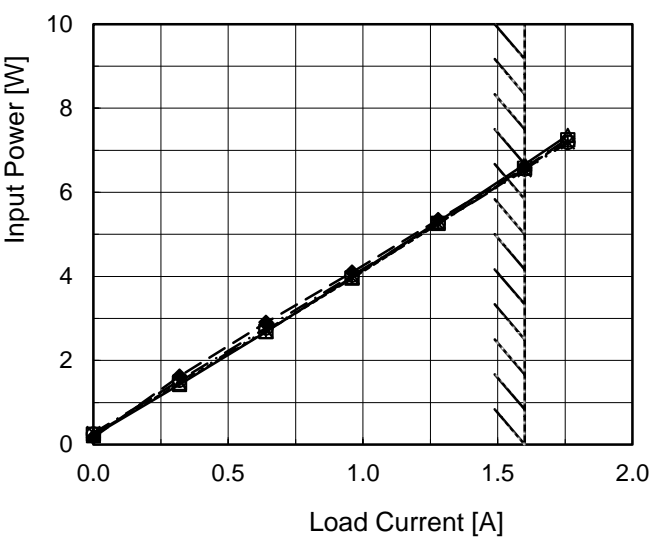
24V

---◇---

Input Volt.

36V

Input Current [A]

| Model   |                  | MGFS6243R3  |                   | Temperature 25°C   |                   |                  |                 |  |  |  |  |                  |                   |                   |                   |                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
|---|------------------|---|-------------------|--|-------------------|------------------|-----------------|--|--|--|--|------------------|-------------------|-------------------|-------------------|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----|---|---|---|---|---|----|---|---|---|---|---|----|---|---|---|---|---|----|---|---|---|---|---|
| Item  |                  | Input Power (by Load Current)   |                   | Testing Circuitry Figure A   |                   |                  |                 |  |  |  |  |                  |                   |                   |                   |                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| Object  |                  |   |                   |  |                   |                  |                 |  |  |  |  |                  |                   |                   |                   |                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| 1.Graph   |                  | <div><div><div>—△—</div><div>Input Volt.</div><div>9V</div></div><div><div>---□---</div><div>Input Volt.</div><div>12V</div></div><div><div>---*---</div><div>Input Volt.</div><div>18V</div></div><div><div>---○---</div><div>Input Volt.</div><div>24V</div></div><div><div>---◇---</div><div>Input Volt.</div><div>36V</div></div></div> <div></div> |                   | 2.Values   |                   |                  |                 |  |  |  |  |                  |                   |                   |                   |                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
|   |                  |   |                   | <table><tr><th rowspan="2">Load Current [A]</th><th colspan="5">Input Power [W]</th></tr><tr><th>Input Volt. 9[V]</th><th>Input Volt. 12[V]</th><th>Input Volt. 18[V]</th><th>Input Volt. 24[V]</th><th>Input Volt. 36[V]</th></tr><tr><td>0.00</td><td>0.21</td><td>0.24</td><td>0.27</td><td>0.25</td><td>0.17</td></tr><tr><td>0.32</td><td>1.43</td><td>1.46</td><td>1.50</td><td>1.53</td><td>1.63</td></tr><tr><td>0.64</td><td>2.68</td><td>2.69</td><td>2.71</td><td>2.77</td><td>2.90</td></tr><tr><td>0.96</td><td>3.98</td><td>3.95</td><td>3.97</td><td>4.02</td><td>4.10</td></tr><tr><td>1.28</td><td>5.30</td><td>5.26</td><td>5.25</td><td>5.26</td><td>5.35</td></tr><tr><td>1.60</td><td>6.66</td><td>6.57</td><td>6.52</td><td>6.55</td><td>6.58</td></tr><tr><td>1.76</td><td>7.35</td><td>7.24</td><td>7.19</td><td>7.19</td><td>7.28</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr></table> |                   | Load Current [A] | Input Power [W] |  |  |  |  | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] | 0.00 | 0.21 | 0.24 | 0.27 | 0.25 | 0.17 | 0.32 | 1.43 | 1.46 | 1.50 | 1.53 | 1.63 | 0.64 | 2.68 | 2.69 | 2.71 | 2.77 | 2.90 | 0.96 | 3.98 | 3.95 | 3.97 | 4.02 | 4.10 | 1.28 | 5.30 | 5.26 | 5.25 | 5.26 | 5.35 | 1.60 | 6.66 | 6.57 | 6.52 | 6.55 | 6.58 | 1.76 | 7.35 | 7.24 | 7.19 | 7.19 | 7.28 | -- | - | - | - | - | - | -- | - | - | - | - | - | -- | - | - | - | - | - | -- | - | - | - | - | - |
| Load Current [A]  | Input Power [W]  |   |                   |  |                   |                  |                 |  |  |  |  |                  |                   |                   |                   |                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
|   | Input Volt. 9[V] | Input Volt. 12[V]   | Input Volt. 18[V] | Input Volt. 24[V]  | Input Volt. 36[V] |                  |                 |  |  |  |  |                  |                   |                   |                   |                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| 0.00  | 0.21             | 0.24  | 0.27              | 0.25   | 0.17              |                  |                 |  |  |  |  |                  |                   |                   |                   |                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| 0.32  | 1.43             | 1.46  | 1.50              | 1.53   | 1.63              |                  |                 |  |  |  |  |                  |                   |                   |                   |                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| 0.64  | 2.68             | 2.69  | 2.71              | 2.77   | 2.90              |                  |                 |  |  |  |  |                  |                   |                   |                   |                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| 0.96  | 3.98             | 3.95  | 3.97              | 4.02   | 4.10              |                  |                 |  |  |  |  |                  |                   |                   |                   |                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| 1.28  | 5.30             | 5.26  | 5.25              | 5.26   | 5.35              |                  |                 |  |  |  |  |                  |                   |                   |                   |                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| 1.60  | 6.66             | 6.57  | 6.52              | 6.55   | 6.58              |                  |                 |  |  |  |  |                  |                   |                   |                   |                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| 1.76  | 7.35             | 7.24  | 7.19              | 7.19   | 7.28              |                  |                 |  |  |  |  |                  |                   |                   |                   |                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| --  | -                | -   | -                 | -  | -                 |                  |                 |  |  |  |  |                  |                   |                   |                   |                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| --  | -                | -   | -                 | -  | -                 |                  |                 |  |  |  |  |                  |                   |                   |                   |                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| --  | -                | -   | -                 | -  | -                 |                  |                 |  |  |  |  |                  |                   |                   |                   |                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| --  | -                | -   | -                 | -  | -                 |                  |                 |  |  |  |  |                  |                   |                   |                   |                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| Note: Slanted line shows the range of the rated load current. |                  |   |                   |  |                   |                  |                 |  |  |  |  |                  |                   |                   |                   |                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |



| Model  |                | MGFS6243R3                    |  | Temperature 25°C  |  |                   |                |  |          |           |     |      |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|--|----------------|-------------------------------|--|---|--|-------------------|----------------|--|----------|-----------|-----|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Item   |                | Efficiency (by Input Voltage) |  | Testing Circuitry Figure A  |  |                   |                |  |          |           |     |      |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Object   |                |                               |  |   |  |                   |                |  |          |           |     |      |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 1.Graph  |                |                               |  | 2.Values  |  |                   |                |  |          |           |     |      |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| <div><div><div>---</div><div>□</div><div>---</div></div><div>Load 50%</div><div><div>—</div><div>△</div><div>—</div></div><div>Load 100%</div></div> <p>Note: Slanted line shows the range of the rated input voltage.</p> |                |                               |  | <table><tr><th rowspan="2">Input Voltage [V]</th><th colspan="2">Efficiency [%]</th></tr><tr><th>Load 50%</th><th>Load 100%</th></tr><tr><td>8.6</td><td>80.2</td><td>79.9</td></tr><tr><td>9.0</td><td>80.1</td><td>79.8</td></tr><tr><td>12.0</td><td>79.9</td><td>80.9</td></tr><tr><td>15.0</td><td>79.4</td><td>81.2</td></tr><tr><td>18.0</td><td>79.3</td><td>81.6</td></tr><tr><td>24.0</td><td>78.5</td><td>81.2</td></tr><tr><td>30.0</td><td>77.4</td><td>81.1</td></tr><tr><td>36.0</td><td>76.1</td><td>80.8</td></tr><tr><td>40.0</td><td>75.2</td><td>79.8</td></tr></table> |  | Input Voltage [V] | Efficiency [%] |  | Load 50% | Load 100% | 8.6 | 80.2 | 79.9 | 9.0 | 80.1 | 79.8 | 12.0 | 79.9 | 80.9 | 15.0 | 79.4 | 81.2 | 18.0 | 79.3 | 81.6 | 24.0 | 78.5 | 81.2 | 30.0 | 77.4 | 81.1 | 36.0 | 76.1 | 80.8 | 40.0 | 75.2 | 79.8 |
| Input Voltage [V]  | Efficiency [%] |                               |  |   |  |                   |                |  |          |           |     |      |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|  | Load 50%       | Load 100%                     |  |   |  |                   |                |  |          |           |     |      |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 8.6  | 80.2           | 79.9                          |  |   |  |                   |                |  |          |           |     |      |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 9.0  | 80.1           | 79.8                          |  |   |  |                   |                |  |          |           |     |      |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 12.0   | 79.9           | 80.9                          |  |   |  |                   |                |  |          |           |     |      |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 15.0   | 79.4           | 81.2                          |  |   |  |                   |                |  |          |           |     |      |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 18.0   | 79.3           | 81.6                          |  |   |  |                   |                |  |          |           |     |      |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 24.0   | 78.5           | 81.2                          |  |   |  |                   |                |  |          |           |     |      |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 30.0   | 77.4           | 81.1                          |  |   |  |                   |                |  |          |           |     |      |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 36.0   | 76.1           | 80.8                          |  |   |  |                   |                |  |          |           |     |      |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 40.0   | 75.2           | 79.8                          |  |   |  |                   |                |  |          |           |     |      |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

| Model            |                  | MGFS6243R3   |                   | Temperature 25°C           |                   |  |  |  |  |                  |                   |                   |                   |                   |      |   |   |   |   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |  |  |
|------------------|------------------|--|-------------------|----------------------------|-------------------|--|--|--|--|------------------|-------------------|-------------------|-------------------|-------------------|------|---|---|---|---|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----|---|---|---|---|---|----|---|---|---|---|---|----|---|---|---|---|---|----|---|---|---|---|---|--|--|
| Item             |                  | Efficiency (by Load Current)   |                   | Testing Circuitry Figure A |                   |  |  |  |  |                  |                   |                   |                   |                   |      |   |   |   |   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |  |  |
| Object           |                  |  |                   |                            |                   |  |  |  |  |                  |                   |                   |                   |                   |      |   |   |   |   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |  |  |
| 1.Graph          |                  | <div><div><div>—△—</div><div>Input Volt.</div><div>9V</div></div><div><div>---□---</div><div>Input Volt.</div><div>12V</div></div><div><div>---*---</div><div>Input Volt.</div><div>18V</div></div><div><div>---○---</div><div>Input Volt.</div><div>24V</div></div><div><div>---◇---</div><div>Input Volt.</div><div>36V</div></div></div> <div><div>Efficiency [%]</div><div><div>90</div><div>80</div><div>70</div><div>60</div><div>50</div></div><div><div>0.0</div><div>0.5</div><div>1.0</div><div>1.5</div><div>2.0</div></div><div><div>Load Current [A]</div><div>Note: Slanted line shows the range of the rated load current.</div></div></div>  |                   | 2.Values                   |                   |  |  |  |  |                  |                   |                   |                   |                   |      |   |   |   |   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |  |  |
|                  |                  | <table><tr><th rowspan="2">Load Current [A]</th><th colspan="5">Efficiency [%]</th></tr><tr><th>Input Volt. 9[V]</th><th>Input Volt. 12[V]</th><th>Input Volt. 18[V]</th><th>Input Volt. 24[V]</th><th>Input Volt. 36[V]</th></tr><tr><td>0.00</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>0.32</td><td>74.2</td><td>72.8</td><td>70.7</td><td>69.5</td><td>65.3</td></tr><tr><td>0.64</td><td>79.3</td><td>79.0</td><td>78.2</td><td>76.8</td><td>73.2</td></tr><tr><td>0.96</td><td>80.2</td><td>80.7</td><td>80.4</td><td>79.3</td><td>77.8</td></tr><tr><td>1.28</td><td>80.2</td><td>80.9</td><td>80.9</td><td>80.8</td><td>79.5</td></tr><tr><td>1.60</td><td>79.8</td><td>80.9</td><td>81.6</td><td>81.2</td><td>80.8</td></tr><tr><td>1.76</td><td>79.5</td><td>80.7</td><td>81.3</td><td>81.3</td><td>80.3</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr></table> |                   | Load Current [A]           | Efficiency [%]    |  |  |  |  | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] | 0.00 | - | - | - | - | - | 0.32 | 74.2 | 72.8 | 70.7 | 69.5 | 65.3 | 0.64 | 79.3 | 79.0 | 78.2 | 76.8 | 73.2 | 0.96 | 80.2 | 80.7 | 80.4 | 79.3 | 77.8 | 1.28 | 80.2 | 80.9 | 80.9 | 80.8 | 79.5 | 1.60 | 79.8 | 80.9 | 81.6 | 81.2 | 80.8 | 1.76 | 79.5 | 80.7 | 81.3 | 81.3 | 80.3 | -- | - | - | - | - | - | -- | - | - | - | - | - | -- | - | - | - | - | - | -- | - | - | - | - | - |  |  |
| Load Current [A] | Efficiency [%]   |  |                   |                            |                   |  |  |  |  |                  |                   |                   |                   |                   |      |   |   |   |   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |  |  |
|                  | Input Volt. 9[V] | Input Volt. 12[V]  | Input Volt. 18[V] | Input Volt. 24[V]          | Input Volt. 36[V] |  |  |  |  |                  |                   |                   |                   |                   |      |   |   |   |   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |  |  |
| 0.00             | -                | -  | -                 | -                          | -                 |  |  |  |  |                  |                   |                   |                   |                   |      |   |   |   |   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |  |  |
| 0.32             | 74.2             | 72.8   | 70.7              | 69.5                       | 65.3              |  |  |  |  |                  |                   |                   |                   |                   |      |   |   |   |   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |  |  |
| 0.64             | 79.3             | 79.0   | 78.2              | 76.8                       | 73.2              |  |  |  |  |                  |                   |                   |                   |                   |      |   |   |   |   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |  |  |
| 0.96             | 80.2             | 80.7   | 80.4              | 79.3                       | 77.8              |  |  |  |  |                  |                   |                   |                   |                   |      |   |   |   |   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |  |  |
| 1.28             | 80.2             | 80.9   | 80.9              | 80.8                       | 79.5              |  |  |  |  |                  |                   |                   |                   |                   |      |   |   |   |   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |  |  |
| 1.60             | 79.8             | 80.9   | 81.6              | 81.2                       | 80.8              |  |  |  |  |                  |                   |                   |                   |                   |      |   |   |   |   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |  |  |
| 1.76             | 79.5             | 80.7   | 81.3              | 81.3                       | 80.3              |  |  |  |  |                  |                   |                   |                   |                   |      |   |   |   |   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |  |  |
| --               | -                | -  | -                 | -                          | -                 |  |  |  |  |                  |                   |                   |                   |                   |      |   |   |   |   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |  |  |
| --               | -                | -  | -                 | -                          | -                 |  |  |  |  |                  |                   |                   |                   |                   |      |   |   |   |   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |  |  |
| --               | -                | -  | -                 | -                          | -                 |  |  |  |  |                  |                   |                   |                   |                   |      |   |   |   |   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |  |  |
| --               | -                | -  | -                 | -                          | -                 |  |  |  |  |                  |                   |                   |                   |                   |      |   |   |   |   |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |  |  |



| Model  | MGFS6243R3         |   |          |                   |                    |  |          |           |     |       |       |     |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |
|--|--------------------|---|----------|-------------------|--------------------|--|----------|-----------|-----|-------|-------|-----|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| Item   | Line Regulation    | Temperature   | 25°C     |                   |                    |  |          |           |     |       |       |     |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |
| Object   | +3.3V1.6A          | Testing Circuitry   | Figure A |                   |                    |  |          |           |     |       |       |     |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |
| 1.Graph  |                    | 2.Values  |          |                   |                    |  |          |           |     |       |       |     |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |
| <div><div><div>---</div><div>□</div><div>---</div></div><div>Load 50%</div><div><div>---</div><div>△</div><div>---</div></div><div>Load 100%</div></div> <p>Note: Slanted line shows the range of the rated input voltage.</p> |                    | <table><tr><th rowspan="2">Input Voltage [V]</th><th colspan="2">Output Voltage [V]</th></tr><tr><th>Load 50%</th><th>Load 100%</th></tr><tr><td>8.6</td><td>3.318</td><td>3.317</td></tr><tr><td>9.0</td><td>3.318</td><td>3.317</td></tr><tr><td>12.0</td><td>3.318</td><td>3.317</td></tr><tr><td>15.0</td><td>3.318</td><td>3.317</td></tr><tr><td>18.0</td><td>3.318</td><td>3.317</td></tr><tr><td>24.0</td><td>3.318</td><td>3.317</td></tr><tr><td>30.0</td><td>3.318</td><td>3.317</td></tr><tr><td>36.0</td><td>3.318</td><td>3.317</td></tr><tr><td>40.0</td><td>3.318</td><td>3.317</td></tr></table> |          | Input Voltage [V] | Output Voltage [V] |  | Load 50% | Load 100% | 8.6 | 3.318 | 3.317 | 9.0 | 3.318 | 3.317 | 12.0 | 3.318 | 3.317 | 15.0 | 3.318 | 3.317 | 18.0 | 3.318 | 3.317 | 24.0 | 3.318 | 3.317 | 30.0 | 3.318 | 3.317 | 36.0 | 3.318 | 3.317 | 40.0 | 3.318 | 3.317 |
| Input Voltage [V]  | Output Voltage [V] |   |          |                   |                    |  |          |           |     |       |       |     |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |
|  | Load 50%           | Load 100%   |          |                   |                    |  |          |           |     |       |       |     |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |
| 8.6  | 3.318              | 3.317   |          |                   |                    |  |          |           |     |       |       |     |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |
| 9.0  | 3.318              | 3.317   |          |                   |                    |  |          |           |     |       |       |     |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |
| 12.0   | 3.318              | 3.317   |          |                   |                    |  |          |           |     |       |       |     |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |
| 15.0   | 3.318              | 3.317   |          |                   |                    |  |          |           |     |       |       |     |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |
| 18.0   | 3.318              | 3.317   |          |                   |                    |  |          |           |     |       |       |     |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |
| 24.0   | 3.318              | 3.317   |          |                   |                    |  |          |           |     |       |       |     |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |
| 30.0   | 3.318              | 3.317   |          |                   |                    |  |          |           |     |       |       |     |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |
| 36.0   | 3.318              | 3.317   |          |                   |                    |  |          |           |     |       |       |     |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |
| 40.0   | 3.318              | 3.317   |          |                   |                    |  |          |           |     |       |       |     |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |



| Model  | MGFS6243R3         |                   |  |                   |                   |                  |                    |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
|--|--------------------|-------------------|--|-------------------|-------------------|------------------|--------------------|--|--|--|--|------------------|-------------------|-------------------|-------------------|-------------------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|----|---|---|---|---|---|----|---|---|---|---|---|----|---|---|---|---|---|----|---|---|---|---|---|
| Item   | Load Regulation    |                   | Temperature  |                   | 25°C              |                  |                    |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| Object   | +3.3V1.6A          |                   | Testing Circuitry  |                   | Figure A          |                  |                    |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| 1.Graph  |                    |                   | 2.Values   |                   |                   |                  |                    |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| <div><div><div>—△—</div><div>Input Volt.</div><div>9V</div></div><div><div>---□---</div><div>Input Volt.</div><div>12V</div></div><div><div>---*---</div><div>Input Volt.</div><div>18V</div></div><div><div>---○---</div><div>Input Volt.</div><div>24V</div></div><div><div>---◇---</div><div>Input Volt.</div><div>36V</div></div></div> <div><div>Output Voltage [V]</div><div><div>3.39</div><div>3.36</div><div>3.33</div><div>3.30</div><div>3.27</div><div>3.24</div></div><div><div>0.0</div><div>0.5</div><div>1.0</div><div>1.5</div><div>2.0</div></div><div>Load Current [A]</div></div> <div>Note: Slanted line shows the range of the rated load current.</div> |                    |                   | <table><tr><th rowspan="2">Load Current [A]</th><th colspan="5">Output Voltage [V]</th></tr><tr><th>Input Volt. 9[V]</th><th>Input Volt. 12[V]</th><th>Input Volt. 18[V]</th><th>Input Volt. 24[V]</th><th>Input Volt. 36[V]</th></tr><tr><td>0.00</td><td>3.321</td><td>3.321</td><td>3.321</td><td>3.321</td><td>3.321</td></tr><tr><td>0.32</td><td>3.320</td><td>3.320</td><td>3.320</td><td>3.320</td><td>3.320</td></tr><tr><td>0.64</td><td>3.319</td><td>3.319</td><td>3.319</td><td>3.319</td><td>3.319</td></tr><tr><td>0.96</td><td>3.319</td><td>3.319</td><td>3.319</td><td>3.319</td><td>3.319</td></tr><tr><td>1.28</td><td>3.318</td><td>3.318</td><td>3.318</td><td>3.318</td><td>3.318</td></tr><tr><td>1.60</td><td>3.317</td><td>3.317</td><td>3.317</td><td>3.317</td><td>3.317</td></tr><tr><td>1.76</td><td>3.316</td><td>3.316</td><td>3.316</td><td>3.316</td><td>3.316</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr></table> |                   |                   | Load Current [A] | Output Voltage [V] |  |  |  |  | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] | 0.00 | 3.321 | 3.321 | 3.321 | 3.321 | 3.321 | 0.32 | 3.320 | 3.320 | 3.320 | 3.320 | 3.320 | 0.64 | 3.319 | 3.319 | 3.319 | 3.319 | 3.319 | 0.96 | 3.319 | 3.319 | 3.319 | 3.319 | 3.319 | 1.28 | 3.318 | 3.318 | 3.318 | 3.318 | 3.318 | 1.60 | 3.317 | 3.317 | 3.317 | 3.317 | 3.317 | 1.76 | 3.316 | 3.316 | 3.316 | 3.316 | 3.316 | -- | - | - | - | - | - | -- | - | - | - | - | - | -- | - | - | - | - | - | -- | - | - | - | - | - |
| Load Current [A]   | Output Voltage [V] |                   |  |                   |                   |                  |                    |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
|  | Input Volt. 9[V]   | Input Volt. 12[V] | Input Volt. 18[V]  | Input Volt. 24[V] | Input Volt. 36[V] |                  |                    |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| 0.00   | 3.321              | 3.321             | 3.321  | 3.321             | 3.321             |                  |                    |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| 0.32   | 3.320              | 3.320             | 3.320  | 3.320             | 3.320             |                  |                    |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| 0.64   | 3.319              | 3.319             | 3.319  | 3.319             | 3.319             |                  |                    |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| 0.96   | 3.319              | 3.319             | 3.319  | 3.319             | 3.319             |                  |                    |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| 1.28   | 3.318              | 3.318             | 3.318  | 3.318             | 3.318             |                  |                    |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| 1.60   | 3.317              | 3.317             | 3.317  | 3.317             | 3.317             |                  |                    |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| 1.76   | 3.316              | 3.316             | 3.316  | 3.316             | 3.316             |                  |                    |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| --   | -                  | -                 | -  | -                 | -                 |                  |                    |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| --   | -                  | -                 | -  | -                 | -                 |                  |                    |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| --   | -                  | -                 | -  | -                 | -                 |                  |                    |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |
| --   | -                  | -                 | -  | -                 | -                 |                  |                    |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |

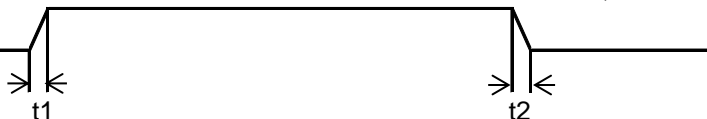
**COSEL**

|        |                       |                   |          |
|--------|-----------------------|-------------------|----------|
| Model  | MGFS6243R3            | Temperature       | 25°C     |
| Item   | Dynamic Load Response | Testing Circuitry | Figure A |
| Object | +3.3V1.6A             |                   |          |

Input Volt. 24 V  
Cycle 100 ms

$t_1, t_2 = 100 \mu s$

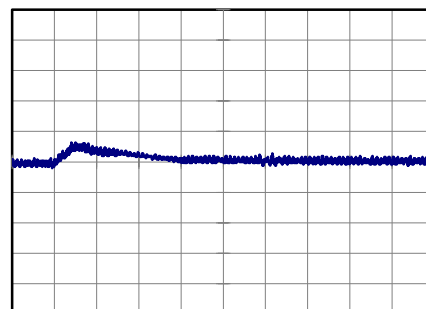
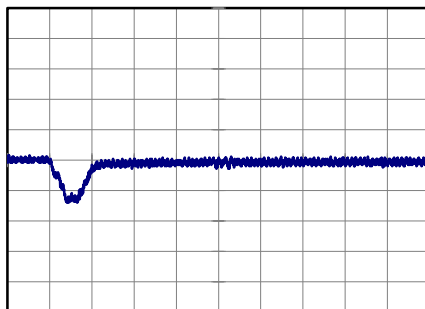
Load Current



Min.Load (0A)  $\longleftrightarrow$   
Load 100% (1.6A)

200 mV/div

100  $\mu s$ /div

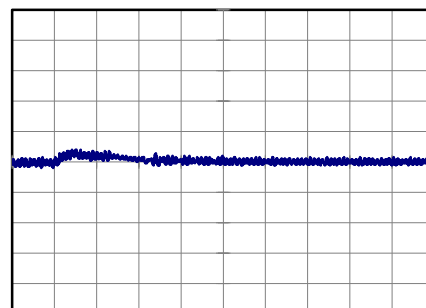
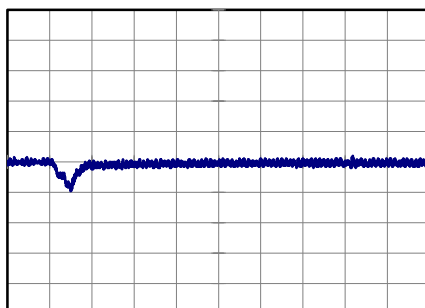


100  $\mu s$ /div

Min.Load (0A)  $\longleftrightarrow$   
Load 50% (0.8A)

200 mV/div

100  $\mu s$ /div

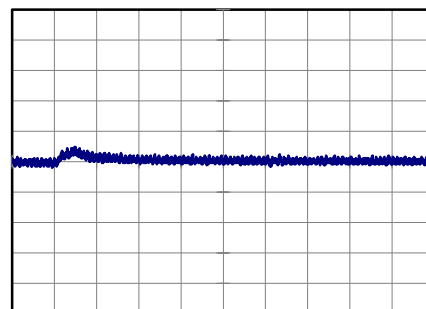
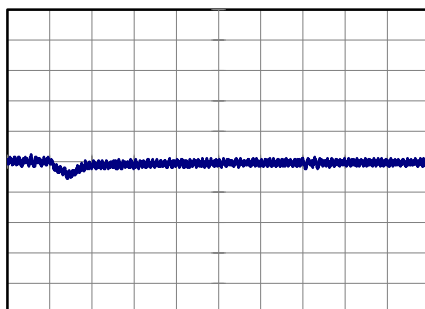


100  $\mu s$ /div

Load 50% (0.8A)  $\longleftrightarrow$   
Load 100% (1.6A)

200 mV/div

100  $\mu s$ /div



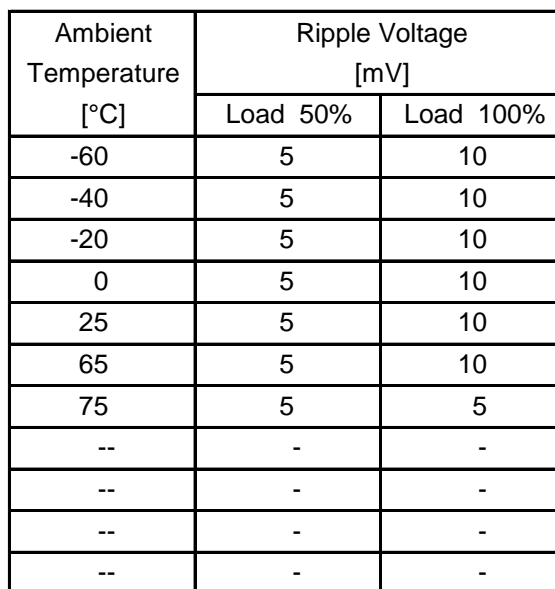
100  $\mu s$ /div

| Model   |                     | MGFS6243R3                       |  | Temperature 25°C  |  |                  |                     |  |                   |                    |      |   |    |      |   |    |      |   |   |      |    |   |      |    |   |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
|---|---------------------|----------------------------------|--|---|--|------------------|---------------------|--|-------------------|--------------------|------|---|----|------|---|----|------|---|---|------|----|---|------|----|---|------|----|----|------|----|----|----|---|---|----|---|---|----|---|---|----|---|---|
| Item  |                     | Ripple Voltage (by Load Current) |  | Testing Circuitry Figure B  |  |                  |                     |  |                   |                    |      |   |    |      |   |    |      |   |   |      |    |   |      |    |   |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| Object  |                     | +3.3V1.6A                        |  |   |  |                  |                     |  |                   |                    |      |   |    |      |   |    |      |   |   |      |    |   |      |    |   |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| 1.Graph   |                     |                                  |  | 2.Values  |  |                  |                     |  |                   |                    |      |   |    |      |   |    |      |   |   |      |    |   |      |    |   |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| <div><div><div>—△—</div><div>Input Volt.</div><div>9V</div></div><div><div>- - ○ - -</div><div>Input Volt.</div><div>36V</div></div></div> <p>Ripple Voltage [mV]</p> <p>Load Current [A]</p> |                     |                                  |  | <table><tr><th rowspan="2">Load Current [A]</th><th colspan="2">Ripple Voltage [mV]</th></tr><tr><th>Input Volt. 9 [V]</th><th>Input Volt. 36 [V]</th></tr><tr><td>0.00</td><td>5</td><td>25</td></tr><tr><td>0.32</td><td>5</td><td>10</td></tr><tr><td>0.64</td><td>5</td><td>5</td></tr><tr><td>0.96</td><td>10</td><td>5</td></tr><tr><td>1.28</td><td>10</td><td>5</td></tr><tr><td>1.60</td><td>20</td><td>10</td></tr><tr><td>1.76</td><td>25</td><td>10</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></table> |  | Load Current [A] | Ripple Voltage [mV] |  | Input Volt. 9 [V] | Input Volt. 36 [V] | 0.00 | 5 | 25 | 0.32 | 5 | 10 | 0.64 | 5 | 5 | 0.96 | 10 | 5 | 1.28 | 10 | 5 | 1.60 | 20 | 10 | 1.76 | 25 | 10 | -- | - | - | -- | - | - | -- | - | - | -- | - | - |
| Load Current [A]  | Ripple Voltage [mV] |                                  |  |   |  |                  |                     |  |                   |                    |      |   |    |      |   |    |      |   |   |      |    |   |      |    |   |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
|   | Input Volt. 9 [V]   | Input Volt. 36 [V]               |  |   |  |                  |                     |  |                   |                    |      |   |    |      |   |    |      |   |   |      |    |   |      |    |   |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| 0.00  | 5                   | 25                               |  |   |  |                  |                     |  |                   |                    |      |   |    |      |   |    |      |   |   |      |    |   |      |    |   |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| 0.32  | 5                   | 10                               |  |   |  |                  |                     |  |                   |                    |      |   |    |      |   |    |      |   |   |      |    |   |      |    |   |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| 0.64  | 5                   | 5                                |  |   |  |                  |                     |  |                   |                    |      |   |    |      |   |    |      |   |   |      |    |   |      |    |   |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| 0.96  | 10                  | 5                                |  |   |  |                  |                     |  |                   |                    |      |   |    |      |   |    |      |   |   |      |    |   |      |    |   |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| 1.28  | 10                  | 5                                |  |   |  |                  |                     |  |                   |                    |      |   |    |      |   |    |      |   |   |      |    |   |      |    |   |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| 1.60  | 20                  | 10                               |  |   |  |                  |                     |  |                   |                    |      |   |    |      |   |    |      |   |   |      |    |   |      |    |   |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| 1.76  | 25                  | 10                               |  |   |  |                  |                     |  |                   |                    |      |   |    |      |   |    |      |   |   |      |    |   |      |    |   |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| --  | -                   | -                                |  |   |  |                  |                     |  |                   |                    |      |   |    |      |   |    |      |   |   |      |    |   |      |    |   |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| --  | -                   | -                                |  |   |  |                  |                     |  |                   |                    |      |   |    |      |   |    |      |   |   |      |    |   |      |    |   |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| --  | -                   | -                                |  |   |  |                  |                     |  |                   |                    |      |   |    |      |   |    |      |   |   |      |    |   |      |    |   |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| --  | -                   | -                                |  |   |  |                  |                     |  |                   |                    |      |   |    |      |   |    |      |   |   |      |    |   |      |    |   |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| <p>Measured by 100 MHz Oscilloscope.</p> <p>Ripple Voltage is shown as p-p in the figure below.</p> <p>Note: Slanted line shows the range of the rated load current.</p>                      |                     |                                  |  |   |  |                  |                     |  |                   |                    |      |   |    |      |   |    |      |   |   |      |    |   |      |    |   |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| <div><p>Ripple [mVp-p]</p><p>Fig.Complex Ripple Wave Form</p></div>   |                     |                                  |  |   |  |                  |                     |  |                   |                    |      |   |    |      |   |    |      |   |   |      |    |   |      |    |   |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |

| Model  |                   | MGFS6243R3   |  |                  |                   |  |                   |                    |      |   |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
|--|-------------------|--|--|------------------|-------------------|--|-------------------|--------------------|------|---|----|------|----|----|------|----|----|------|----|----|------|----|----|------|----|----|------|----|----|----|---|---|----|---|---|----|---|---|----|---|---|
| Item   |                   | Ripple-Noise   |  |                  |                   |  |                   |                    |      |   |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| Object   |                   | +3.3V1.6A  |  |                  |                   |  |                   |                    |      |   |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| 1.Graph  |                   | 2.Values   |  |                  |                   |  |                   |                    |      |   |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| <div><div><div>—△—</div><div>Input Volt.</div><div>9V</div></div><div><div>- - ○ - -</div><div>Input Volt.</div><div>36V</div></div></div> <p>Measured by 100 MHz Oscilloscope.<br/>Ripple-Noise is shown as p-p in the figure below.<br/>Note: Slanted line shows the range of the rated load current.</p> <p>Ripple Noise[mVp-p]</p> |                   | <table><tr><th rowspan="2">Load Current [A]</th><th colspan="2">Ripple-Noise [mV]</th></tr><tr><th>Input Volt. 9 [V]</th><th>Input Volt. 36 [V]</th></tr><tr><td>0.00</td><td>5</td><td>25</td></tr><tr><td>0.32</td><td>10</td><td>15</td></tr><tr><td>0.64</td><td>10</td><td>10</td></tr><tr><td>0.96</td><td>10</td><td>15</td></tr><tr><td>1.28</td><td>15</td><td>15</td></tr><tr><td>1.60</td><td>25</td><td>20</td></tr><tr><td>1.76</td><td>30</td><td>20</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></table> |  | Load Current [A] | Ripple-Noise [mV] |  | Input Volt. 9 [V] | Input Volt. 36 [V] | 0.00 | 5 | 25 | 0.32 | 10 | 15 | 0.64 | 10 | 10 | 0.96 | 10 | 15 | 1.28 | 15 | 15 | 1.60 | 25 | 20 | 1.76 | 30 | 20 | -- | - | - | -- | - | - | -- | - | - | -- | - | - |
| Load Current [A]   | Ripple-Noise [mV] |  |  |                  |                   |  |                   |                    |      |   |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
|  | Input Volt. 9 [V] | Input Volt. 36 [V]   |  |                  |                   |  |                   |                    |      |   |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| 0.00   | 5                 | 25   |  |                  |                   |  |                   |                    |      |   |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| 0.32   | 10                | 15   |  |                  |                   |  |                   |                    |      |   |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| 0.64   | 10                | 10   |  |                  |                   |  |                   |                    |      |   |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| 0.96   | 10                | 15   |  |                  |                   |  |                   |                    |      |   |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| 1.28   | 15                | 15   |  |                  |                   |  |                   |                    |      |   |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| 1.60   | 25                | 20   |  |                  |                   |  |                   |                    |      |   |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| 1.76   | 30                | 20   |  |                  |                   |  |                   |                    |      |   |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| --   | -                 | -  |  |                  |                   |  |                   |                    |      |   |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| --   | -                 | -  |  |                  |                   |  |                   |                    |      |   |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| --   | -                 | -  |  |                  |                   |  |                   |                    |      |   |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| --   | -                 | -  |  |                  |                   |  |                   |                    |      |   |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |
| Fig.Complex Ripple Noise Wave Form   |                   |  |  |                  |                   |  |                   |                    |      |   |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |      |    |    |    |   |   |    |   |   |    |   |   |    |   |   |

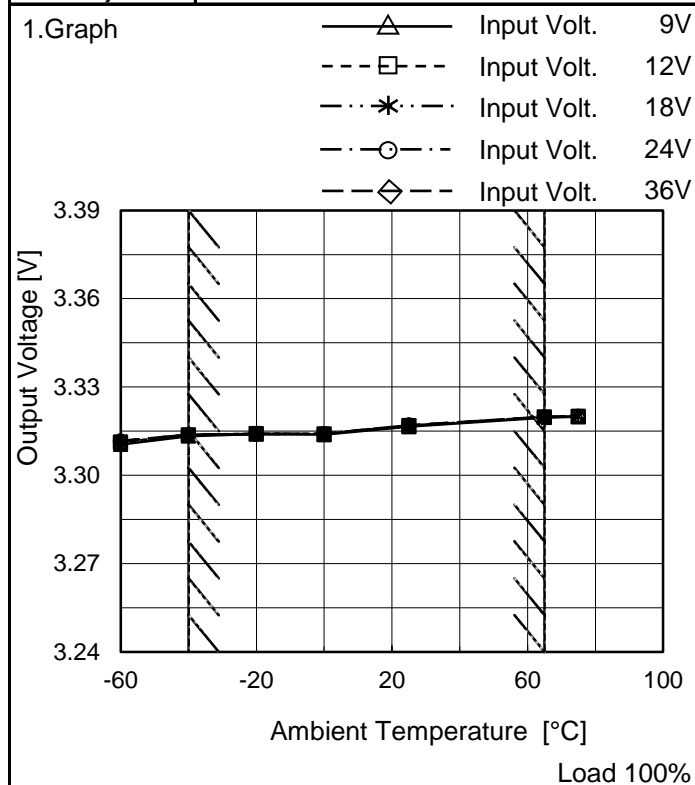
Testing Circuitry Figure B

## 2.Values



Note: Slanted line shows the range of the rated ambient temperature.

|        |                           |
|--------|---------------------------|
| Model  | MGFS6243R3                |
| Item   | Ambient Temperature Drift |
| Object | +3.3V1.6A                 |



Note: Slanted line shows the range of the rated ambient temperature.

Testing Circuitry Figure A

2.Values

| Ambient Temperature [°C] | Output Voltage [V] |                   |                   |                   |                   |
|--------------------------|--------------------|-------------------|-------------------|-------------------|-------------------|
|                          | Input Volt. 9[V]   | Input Volt. 12[V] | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] |
| -60                      | 3.311              | 3.311             | 3.312             | 3.312             | 3.312             |
| -40                      | 3.313              | 3.314             | 3.314             | 3.314             | 3.314             |
| -20                      | 3.314              | 3.314             | 3.314             | 3.314             | 3.314             |
| 0                        | 3.314              | 3.314             | 3.314             | 3.314             | 3.314             |
| 25                       | 3.317              | 3.317             | 3.317             | 3.317             | 3.317             |
| 65                       | 3.320              | 3.320             | 3.320             | 3.320             | 3.320             |
| 75                       | 3.320              | 3.320             | 3.320             | 3.320             | 3.320             |
| --                       | -                  | -                 | -                 | -                 | -                 |
| --                       | -                  | -                 | -                 | -                 | -                 |
| --                       | -                  | -                 | -                 | -                 | -                 |
| --                       | -                  | -                 | -                 | -                 | -                 |

**COSEL**

|        |                         |                            |
|--------|-------------------------|----------------------------|
|        |                         | Testing Circuitry Figure A |
| Model  | MGFS6243R3              |                            |
| Item   | Output Voltage Accuracy |                            |
| Object | +3.3V1.6A               |                            |

### 1. Output Voltage Accuracy

This is defined as the value of the output voltage, regulation load, ambient temperature and input voltage varied at random in the range as specified below.

Temperature : -40 - 65°C

Input Voltage : 9 - 36V

Load Current : 0 - 1.6A

\* Output Voltage Accuracy =  $\pm(\text{Maximum of Output Voltage} - \text{Minimum of Output Voltage}) / 2$

\* Output Voltage Accuracy (Ratio) =  $\frac{\text{Output Voltage Accuracy}}{\text{Rated Output Voltage}} \times 100$

### 2. Values

| Item            | Temperature<br>[°C] | Input<br>Voltage[V] | Output     |            | Output Voltage Accuracy |           |
|-----------------|---------------------|---------------------|------------|------------|-------------------------|-----------|
|                 |                     |                     | Current[A] | Voltage[V] | Value [mV]              | Ratio [%] |
| Maximum Voltage | 65                  | 9                   | 0          | 3.325      | ±6                      | ±0.2      |
| Minimum Voltage | -40                 | 9                   | 1.6        | 3.313      |                         |           |



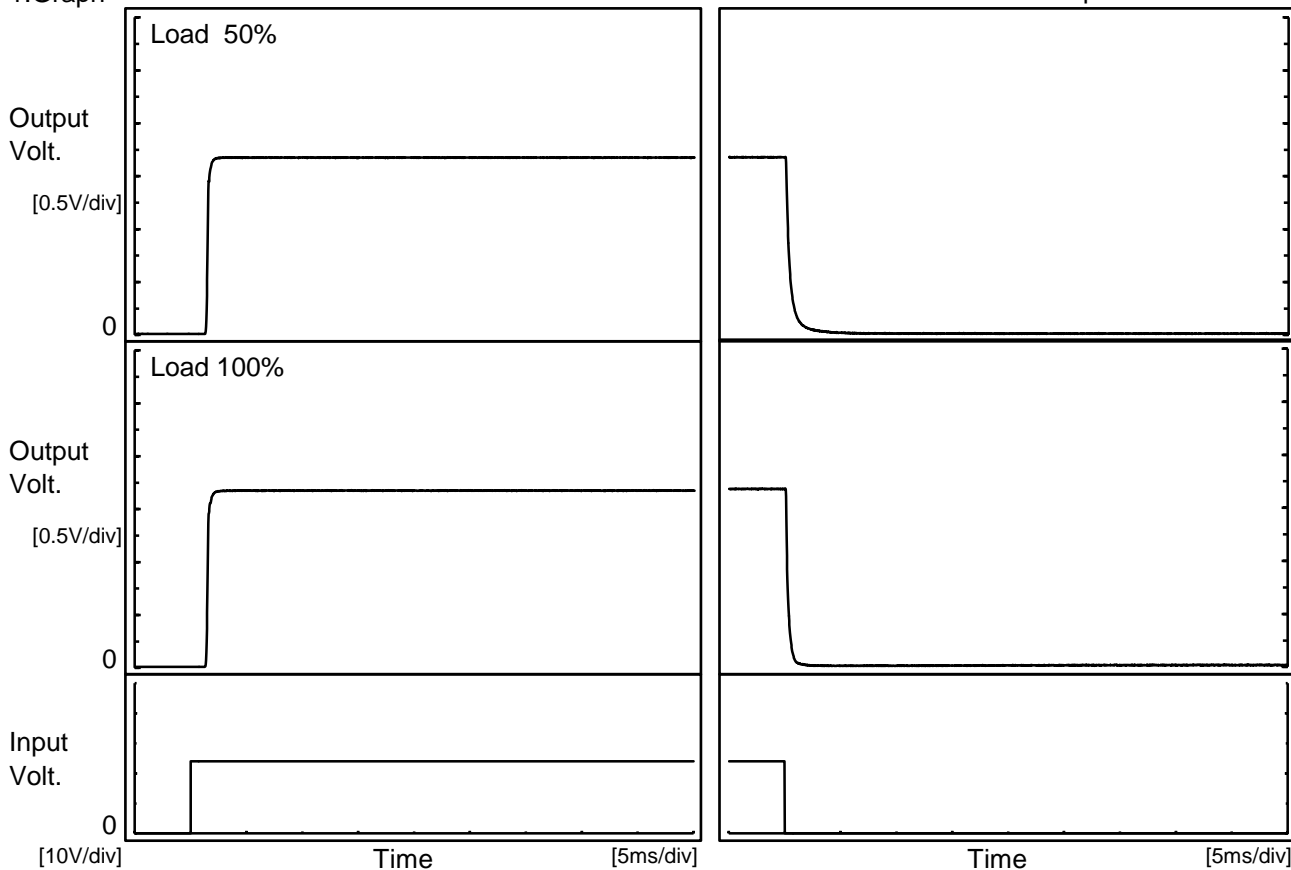
|   |  |                  |  |  |  |
|---|--|------------------|--|--|--|
| Model   |  | MGFS6243R3       |  | Temperature25°C<br>Testing CircuitryFigure A |  |
| Item  |  | Time Lapse Drift |  |  |  |
| Object  |  | +3.3V1.6A        |  |  |  |
| 1.Graph   |  |                  |  | 2.Values                                     |  |
| <div><div><div>Output Voltage [V]</div><div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></di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|  |                  |  |  |  |



# COSEL

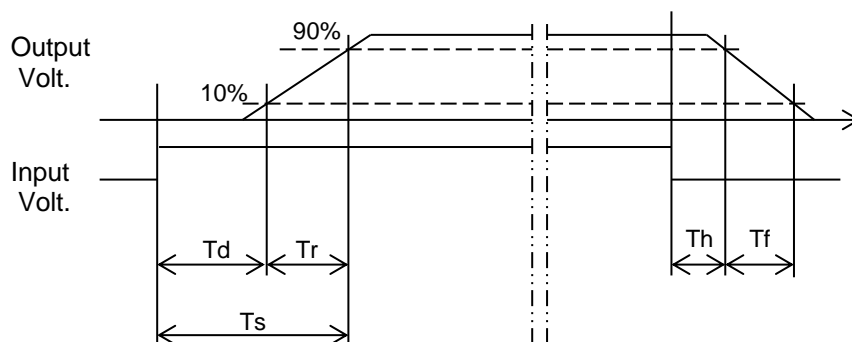
|        |                    |                   |          |
|--------|--------------------|-------------------|----------|
| Model  | MGFS6243R3         | Temperature       | 25°C     |
| Item   | Rise and Fall Time | Testing Circuitry | Figure A |
| Object | +3.3V1.6A          |                   |          |

## 1.Graph



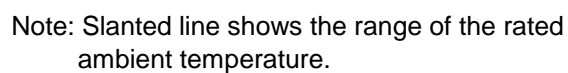
## 2.Values

| Load \ Time | Td  | Tr  | Ts  | Th  | Tf  |
|-------------|-----|-----|-----|-----|-----|
| 50 %        | 1.4 | 0.3 | 1.7 | 0.2 | 0.9 |
| 100 %       | 1.4 | 0.3 | 1.7 | 0.1 | 0.5 |

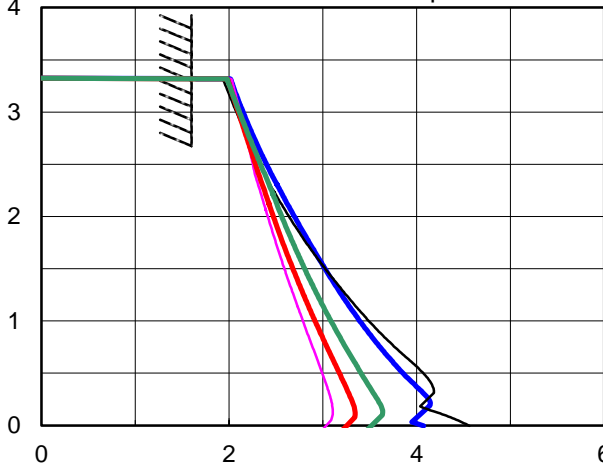


Testing Circuitry Figure A

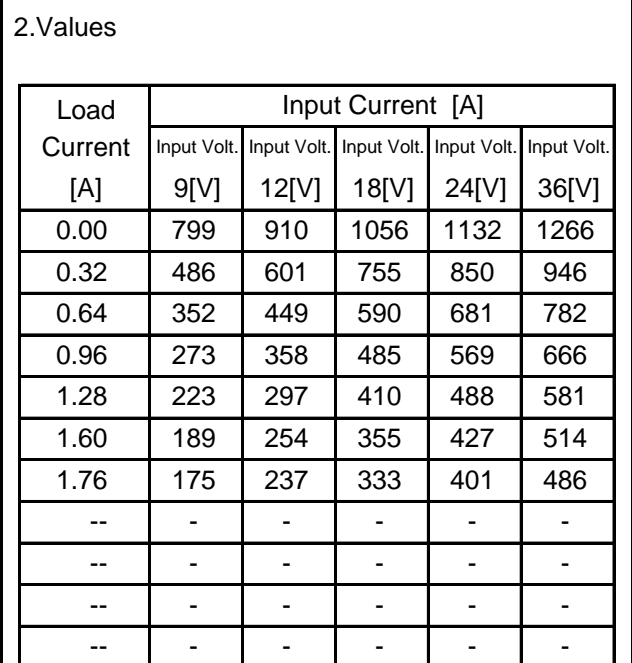
## 2.Values



| Ambient Temperature<br>[°C] | Input Voltage<br>[V] |           |
|-----------------------------|----------------------|-----------|
|                             | Load 50%             | Load 100% |
| -60                         | 7.6                  | 7.7       |
| -40                         | 7.5                  | 7.6       |
| -20                         | 7.5                  | 7.6       |
| 0                           | 7.5                  | 7.6       |
| 25                          | 7.4                  | 7.5       |
| 65                          | 7.3                  | 7.4       |
| 75                          | 7.3                  | 7.4       |
| --                          | -                    | -         |
| --                          | -                    | -         |
| --                          | -                    | -         |
| --                          | -                    | -         |

| <div>LUCEL</div>   |                        |  |                   |                    |                   |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |
|--|------------------------|--|-------------------|--------------------|-------------------|--|--|--|--|------------------|-------------------|-------------------|-------------------|-------------------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|----|---|---|---|---|---|
| Model  | MGFS6243R3             |  |                   |                    |                   |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |
| Item   | Overcurrent Protection | Temperature  | 25°C              |                    |                   |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |
| Object   | +3.3V1.6A              | Testing Circuitry  | Figure A          |                    |                   |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |
| 1.Graph  |                        | 2.Values   |                   |                    |                   |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |
| <div><div><div></div><div>Input Volt.</div><div>9V</div></div><div><div></div><div>Input Volt.</div><div>12V</div></div><div><div></div><div>Input Volt.</div><div>18V</div></div><div><div></div><div>Input Volt.</div><div>24V</div></div><div><div></div><div>Input Volt.</div><div>36V</div></div></div> <div><div><div>Output Voltage [V]</div><div><div>4</div><div>3</div><div>2</div><div>1</div><div>0</div></div><div><div>0</div><div>2</div><div>4</div><div>6</div></div><div>Load Current [A]</div></div></div> <div>Note: Slanted line shows the range of the rated load current.</div> |                        | <table><tr><th rowspan="2">Output Voltage [V]</th><th colspan="5">Load Current [A]</th></tr><tr><th>Input Volt. 9[V]</th><th>Input Volt. 12[V]</th><th>Input Volt. 18[V]</th><th>Input Volt. 24[V]</th><th>Input Volt. 36[V]</th></tr><tr><td>3.14</td><td>2.015</td><td>2.091</td><td>2.053</td><td>2.052</td><td>2.080</td></tr><tr><td>2.97</td><td>2.093</td><td>2.163</td><td>2.122</td><td>2.108</td><td>2.126</td></tr><tr><td>2.64</td><td>2.257</td><td>2.321</td><td>2.269</td><td>2.231</td><td>2.214</td></tr><tr><td>2.31</td><td>2.430</td><td>2.506</td><td>2.420</td><td>2.349</td><td>2.307</td></tr><tr><td>1.98</td><td>2.650</td><td>2.705</td><td>2.568</td><td>2.474</td><td>2.419</td></tr><tr><td>1.65</td><td>2.891</td><td>2.923</td><td>2.728</td><td>2.615</td><td>2.533</td></tr><tr><td>1.32</td><td>3.174</td><td>3.146</td><td>2.893</td><td>2.761</td><td>2.653</td></tr><tr><td>0.99</td><td>3.487</td><td>3.400</td><td>3.089</td><td>2.916</td><td>2.788</td></tr><tr><td>0.66</td><td>3.867</td><td>3.690</td><td>3.297</td><td>3.085</td><td>2.925</td></tr><tr><td>0.33</td><td>4.184</td><td>4.037</td><td>3.519</td><td>3.261</td><td>3.060</td></tr><tr><td>0.00</td><td>4.563</td><td>4.076</td><td>3.428</td><td>3.126</td><td>2.892</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr></table> |                   | Output Voltage [V] | Load Current [A]  |  |  |  |  | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] | 3.14 | 2.015 | 2.091 | 2.053 | 2.052 | 2.080 | 2.97 | 2.093 | 2.163 | 2.122 | 2.108 | 2.126 | 2.64 | 2.257 | 2.321 | 2.269 | 2.231 | 2.214 | 2.31 | 2.430 | 2.506 | 2.420 | 2.349 | 2.307 | 1.98 | 2.650 | 2.705 | 2.568 | 2.474 | 2.419 | 1.65 | 2.891 | 2.923 | 2.728 | 2.615 | 2.533 | 1.32 | 3.174 | 3.146 | 2.893 | 2.761 | 2.653 | 0.99 | 3.487 | 3.400 | 3.089 | 2.916 | 2.788 | 0.66 | 3.867 | 3.690 | 3.297 | 3.085 | 2.925 | 0.33 | 4.184 | 4.037 | 3.519 | 3.261 | 3.060 | 0.00 | 4.563 | 4.076 | 3.428 | 3.126 | 2.892 | -- | - | - | - | - | - |
| Output Voltage [V]   | Load Current [A]       |  |                   |                    |                   |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |
|  | Input Volt. 9[V]       | Input Volt. 12[V]  | Input Volt. 18[V] | Input Volt. 24[V]  | Input Volt. 36[V] |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |
| 3.14   | 2.015                  | 2.091  | 2.053             | 2.052              | 2.080             |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |
| 2.97   | 2.093                  | 2.163  | 2.122             | 2.108              | 2.126             |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |
| 2.64   | 2.257                  | 2.321  | 2.269             | 2.231              | 2.214             |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |
| 2.31   | 2.430                  | 2.506  | 2.420             | 2.349              | 2.307             |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |
| 1.98   | 2.650                  | 2.705  | 2.568             | 2.474              | 2.419             |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |
| 1.65   | 2.891                  | 2.923  | 2.728             | 2.615              | 2.533             |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |
| 1.32   | 3.174                  | 3.146  | 2.893             | 2.761              | 2.653             |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |
| 0.99   | 3.487                  | 3.400  | 3.089             | 2.916              | 2.788             |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |
| 0.66   | 3.867                  | 3.690  | 3.297             | 3.085              | 2.925             |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |
| 0.33   | 4.184                  | 4.037  | 3.519             | 3.261              | 3.060             |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |
| 0.00   | 4.563                  | 4.076  | 3.428             | 3.126              | 2.892             |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |
| --   | -                      | -  | -                 | -                  | -                 |  |  |  |  |                  |                   |                   |                   |                   |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |       |    |   |   |   |   |   |

|                   |          |
|-------------------|----------|
| Temperature       | 25°C     |
| Testing Circuitry | Figure A |



When load current is low, MG operates intermittently, so switching frequency would not become constant.

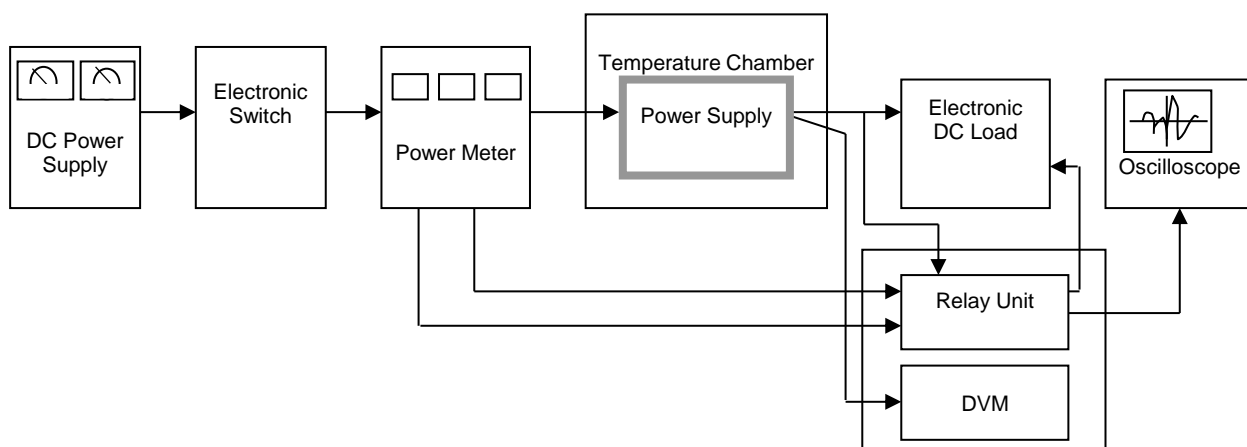


Figure A

Data Acquisition/Control Unit

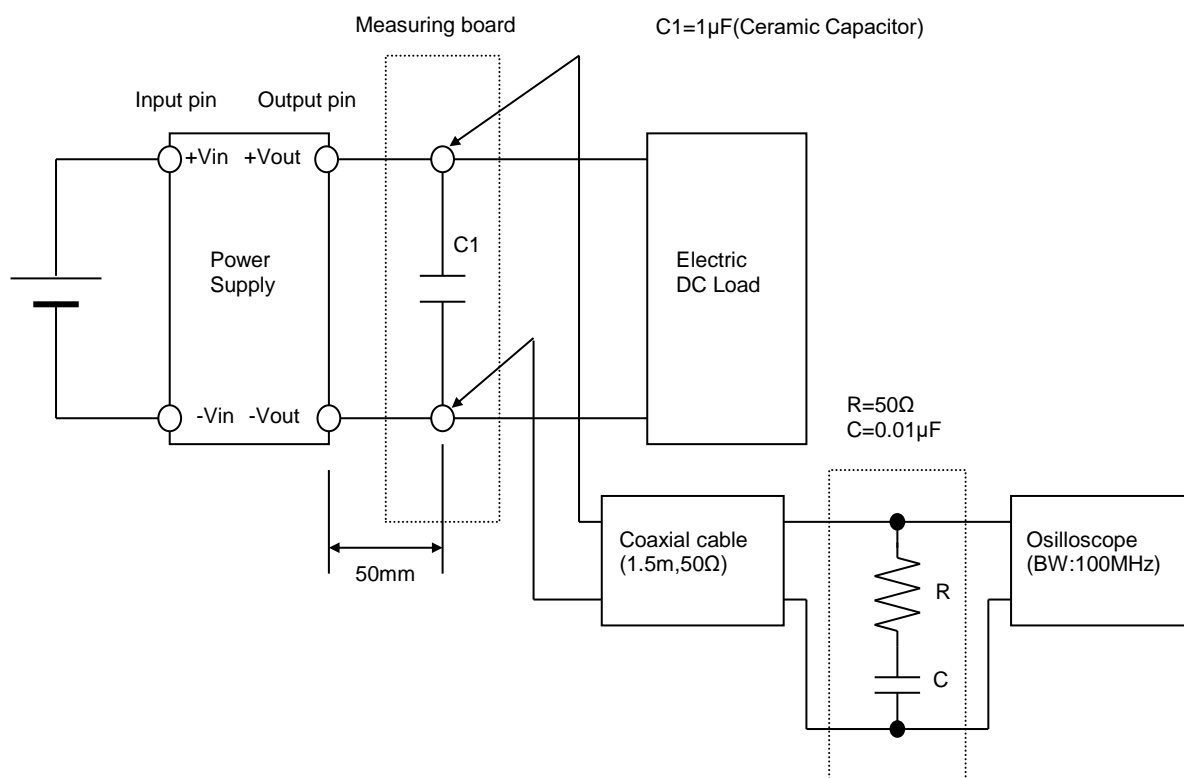


Figure B (Ripple and Ripple noise Characteristic)