

TEST DATA OF MGFS152405

Regulated DC Power Supply
September 14, 2010

Approved by : Kazunari Asano
Kazunari Asano Design Manager

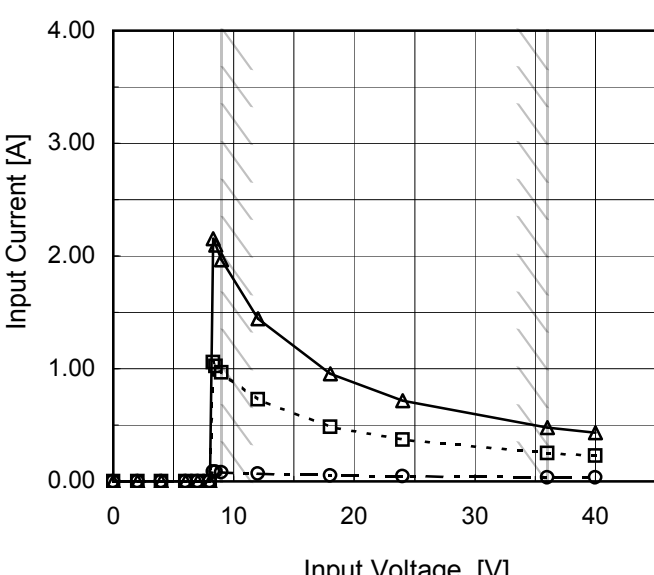
Prepared by : Ryoko Ueda
Ryoko Ueda Design Engineer

COSEL CO.,LTD.

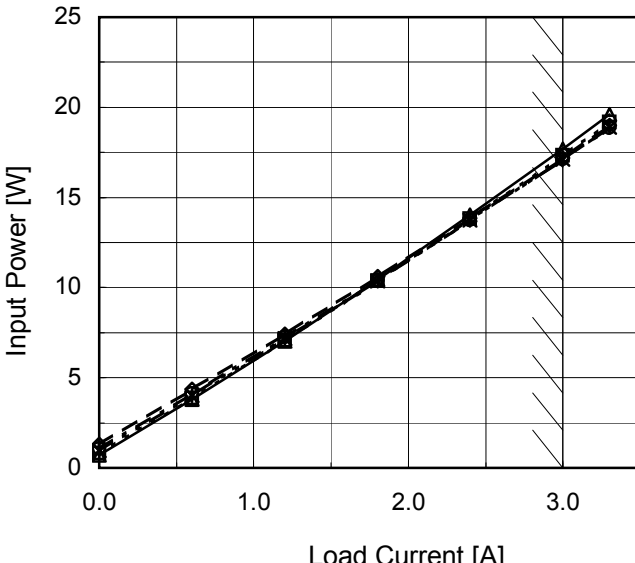
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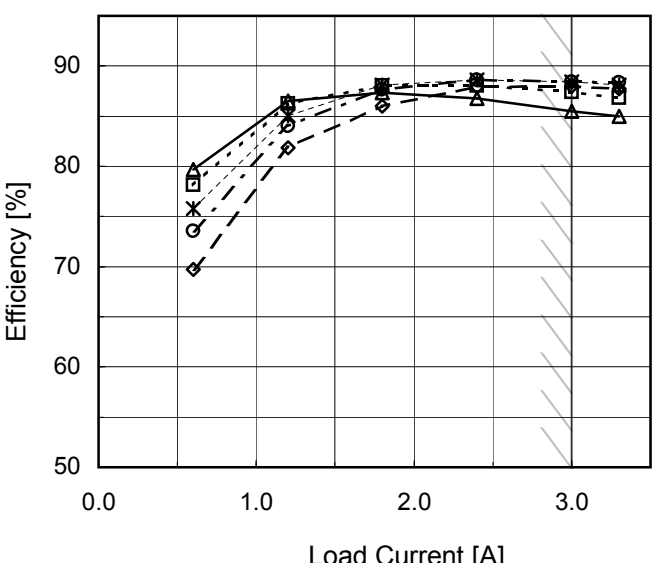
(Final Page 18)

| Model | | MGFS152405 | | 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>  | | 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>2.0</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>4.0</td><td>0.001</td><td>0.002</td><td>0.001</td></tr><tr><td>6.0</td><td>0.002</td><td>0.002</td><td>0.002</td></tr><tr><td>7.0</td><td>0.002</td><td>0.002</td><td>0.002</td></tr><tr><td>8.0</td><td>0.002</td><td>0.003</td><td>0.003</td></tr><tr><td>8.3</td><td>0.084</td><td>1.057</td><td>2.155</td></tr><tr><td>8.5</td><td>0.083</td><td>1.024</td><td>2.099</td></tr><tr><td>9.0</td><td>0.080</td><td>0.967</td><td>1.967</td></tr><tr><td>12.0</td><td>0.067</td><td>0.725</td><td>1.444</td></tr><tr><td>18.0</td><td>0.052</td><td>0.484</td><td>0.954</td></tr><tr><td>24.0</td><td>0.044</td><td>0.368</td><td>0.716</td></tr><tr><td>36.0</td><td>0.036</td><td>0.249</td><td>0.479</td></tr><tr><td>40.0</td><td>0.034</td><td>0.226</td><td>0.432</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 | 2.0 | 0.000 | 0.000 | 0.000 | 4.0 | 0.001 | 0.002 | 0.001 | 6.0 | 0.002 | 0.002 | 0.002 | 7.0 | 0.002 | 0.002 | 0.002 | 8.0 | 0.002 | 0.003 | 0.003 | 8.3 | 0.084 | 1.057 | 2.155 | 8.5 | 0.083 | 1.024 | 2.099 | 9.0 | 0.080 | 0.967 | 1.967 | 12.0 | 0.067 | 0.725 | 1.444 | 18.0 | 0.052 | 0.484 | 0.954 | 24.0 | 0.044 | 0.368 | 0.716 | 36.0 | 0.036 | 0.249 | 0.479 | 40.0 | 0.034 | 0.226 | 0.432 | -- | - | - | - | -- | - | - | - | -- | - | - | - | -- | - | - | - |
| Input Voltage [V] | Input Current [A] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Load 0% | Load 50% | Load 100% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0 | 0.000 | 0.000 | 0.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.0 | 0.000 | 0.000 | 0.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.0 | 0.001 | 0.002 | 0.001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.0 | 0.002 | 0.002 | 0.002 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7.0 | 0.002 | 0.002 | 0.002 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.0 | 0.002 | 0.003 | 0.003 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.3 | 0.084 | 1.057 | 2.155 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.5 | 0.083 | 1.024 | 2.099 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9.0 | 0.080 | 0.967 | 1.967 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12.0 | 0.067 | 0.725 | 1.444 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18.0 | 0.052 | 0.484 | 0.954 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24.0 | 0.044 | 0.368 | 0.716 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 36.0 | 0.036 | 0.249 | 0.479 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 40.0 | 0.034 | 0.226 | 0.432 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Note: Slanted line shows the range of the rated input voltage. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Model | MGFS152405 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---------------------------------|--|-------------------|-------------------|-------------------|--|--|--|--|------------------|-------------------|-------------------|-------------------|-------------------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|----|---|---|---|---|---|----|---|---|---|---|---|----|---|---|---|---|---|----|---|---|---|---|---|
| Item | Input Current (by Load Current) | Temperature | 25°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | _____ | 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><p>Note: Slanted line shows the range of the rated load current.</p></div> | | <table><tr><th rowspan="2">Load Current [A]</th><th colspan="5">Input 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>0.0</td><td>0.080</td><td>0.067</td><td>0.053</td><td>0.044</td><td>0.037</td></tr><tr><td>0.6</td><td>0.425</td><td>0.327</td><td>0.223</td><td>0.173</td><td>0.121</td></tr><tr><td>1.2</td><td>0.783</td><td>0.586</td><td>0.397</td><td>0.302</td><td>0.207</td></tr><tr><td>1.8</td><td>1.156</td><td>0.859</td><td>0.582</td><td>0.436</td><td>0.296</td></tr><tr><td>2.4</td><td>1.565</td><td>1.147</td><td>0.765</td><td>0.571</td><td>0.385</td></tr><tr><td>3.0</td><td>1.968</td><td>1.445</td><td>0.954</td><td>0.716</td><td>0.479</td></tr><tr><td>3.3</td><td>2.190</td><td>1.590</td><td>1.067</td><td>0.786</td><td>0.528</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 Current [A] | | | | | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] | 0.0 | 0.080 | 0.067 | 0.053 | 0.044 | 0.037 | 0.6 | 0.425 | 0.327 | 0.223 | 0.173 | 0.121 | 1.2 | 0.783 | 0.586 | 0.397 | 0.302 | 0.207 | 1.8 | 1.156 | 0.859 | 0.582 | 0.436 | 0.296 | 2.4 | 1.565 | 1.147 | 0.765 | 0.571 | 0.385 | 3.0 | 1.968 | 1.445 | 0.954 | 0.716 | 0.479 | 3.3 | 2.190 | 1.590 | 1.067 | 0.786 | 0.528 | -- | - | - | - | - | - | -- | - | - | - | - | - | -- | - | - | - | - | - | -- | - | - | - | - | - |
| Load Current [A] | Input Current [A] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0 | 0.080 | 0.067 | 0.053 | 0.044 | 0.037 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.6 | 0.425 | 0.327 | 0.223 | 0.173 | 0.121 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.2 | 0.783 | 0.586 | 0.397 | 0.302 | 0.207 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.8 | 1.156 | 0.859 | 0.582 | 0.436 | 0.296 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.4 | 1.565 | 1.147 | 0.765 | 0.571 | 0.385 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.0 | 1.968 | 1.445 | 0.954 | 0.716 | 0.479 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.3 | 2.190 | 1.590 | 1.067 | 0.786 | 0.528 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Model | MGFS152405 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Item | Input Power (by Load Current) | | Temperature | 25°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | | | 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><div>Input Power [W]</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">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>0.0</td><td>0.72</td><td>0.80</td><td>0.94</td><td>1.06</td><td>1.32</td></tr><tr><td>0.6</td><td>3.81</td><td>3.89</td><td>4.01</td><td>4.13</td><td>4.36</td></tr><tr><td>1.2</td><td>7.03</td><td>7.05</td><td>7.16</td><td>7.24</td><td>7.44</td></tr><tr><td>1.8</td><td>10.45</td><td>10.37</td><td>10.36</td><td>10.41</td><td>10.61</td></tr><tr><td>2.4</td><td>14.02</td><td>13.82</td><td>13.74</td><td>13.74</td><td>13.85</td></tr><tr><td>3.0</td><td>17.69</td><td>17.32</td><td>17.11</td><td>17.11</td><td>17.18</td></tr><tr><td>3.3</td><td>19.60</td><td>19.19</td><td>18.90</td><td>18.85</td><td>18.99</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] | 0.0 | 0.72 | 0.80 | 0.94 | 1.06 | 1.32 | 0.6 | 3.81 | 3.89 | 4.01 | 4.13 | 4.36 | 1.2 | 7.03 | 7.05 | 7.16 | 7.24 | 7.44 | 1.8 | 10.45 | 10.37 | 10.36 | 10.41 | 10.61 | 2.4 | 14.02 | 13.82 | 13.74 | 13.74 | 13.85 | 3.0 | 17.69 | 17.32 | 17.11 | 17.11 | 17.18 | 3.3 | 19.60 | 19.19 | 18.90 | 18.85 | 18.99 | -- | - | - | - | - | - | -- | - | - | - | - | - | -- | - | - | - | - | - | -- | - | - | - | - | - |
| 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] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0 | 0.72 | 0.80 | 0.94 | 1.06 | 1.32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.6 | 3.81 | 3.89 | 4.01 | 4.13 | 4.36 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.2 | 7.03 | 7.05 | 7.16 | 7.24 | 7.44 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.8 | 10.45 | 10.37 | 10.36 | 10.41 | 10.61 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.4 | 14.02 | 13.82 | 13.74 | 13.74 | 13.85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.0 | 17.69 | 17.32 | 17.11 | 17.11 | 17.18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.3 | 19.60 | 19.19 | 18.90 | 18.85 | 18.99 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Model | MGFS152405 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|-------------------|----------------|--|----------|-----------|-----|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|
| Item | Efficiency (by Input Voltage) | Temperature | 25°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 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> <div>Load 100%</div> <table><thead><tr><th rowspan="2">Input Voltage [V]</th><th colspan="2">Efficiency [%]</th></tr><tr><th>Load 50%</th><th>Load 100%</th></tr></thead><tbody><tr><td>8.5</td><td>86.9</td><td>85.1</td></tr><tr><td>9.0</td><td>87.1</td><td>85.4</td></tr><tr><td>12.0</td><td>87.6</td><td>87.2</td></tr><tr><td>15.0</td><td>87.5</td><td>88.0</td></tr><tr><td>18.0</td><td>87.1</td><td>88.3</td></tr><tr><td>24.0</td><td>86.3</td><td>88.4</td></tr><tr><td>30.0</td><td>85.2</td><td>88.2</td></tr><tr><td>36.0</td><td>84.4</td><td>87.9</td></tr><tr><td>40.0</td><td>83.9</td><td>87.8</td></tr></tbody></table> | | Input Voltage [V] | Efficiency [%] | | Load 50% | Load 100% | 8.5 | 86.9 | 85.1 | 9.0 | 87.1 | 85.4 | 12.0 | 87.6 | 87.2 | 15.0 | 87.5 | 88.0 | 18.0 | 87.1 | 88.3 | 24.0 | 86.3 | 88.4 | 30.0 | 85.2 | 88.2 | 36.0 | 84.4 | 87.9 | 40.0 | 83.9 | 87.8 | | |
| Input Voltage [V] | Efficiency [%] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Load 50% | Load 100% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.5 | 86.9 | 85.1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9.0 | 87.1 | 85.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12.0 | 87.6 | 87.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15.0 | 87.5 | 88.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18.0 | 87.1 | 88.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24.0 | 86.3 | 88.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30.0 | 85.2 | 88.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 36.0 | 84.4 | 87.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 40.0 | 83.9 | 87.8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Note: Slanted line shows the range of the rated input voltage. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Model | MGFS152405 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|------------------------------|-------------------|---|-------------------|-------------------|------------------|----------------|--|--|--|--|------------------|-------------------|-------------------|-------------------|-------------------|-----|---|---|---|---|---|-----|------|------|------|------|------|-----|------|------|------|------|------|-----|------|------|------|------|------|-----|------|------|------|------|------|-----|------|------|------|------|------|-----|------|------|------|------|------|----|---|---|---|---|---|----|---|---|---|---|---|----|---|---|---|---|---|----|---|---|---|---|---|
| Item | Efficiency (by Load Current) | | Temperature | | 25°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | | | 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>  <p>Efficiency [%]</p> <p>Load Current [A]</p> <p>Note: Slanted line shows the range of the rated load current.</p> | | | <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>0.0</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>0.6</td><td>79.7</td><td>78.1</td><td>75.8</td><td>73.5</td><td>69.7</td></tr><tr><td>1.2</td><td>86.5</td><td>86.3</td><td>85.0</td><td>84.0</td><td>81.8</td></tr><tr><td>1.8</td><td>87.3</td><td>88.0</td><td>88.1</td><td>87.7</td><td>86.0</td></tr><tr><td>2.4</td><td>86.8</td><td>88.0</td><td>88.6</td><td>88.6</td><td>87.9</td></tr><tr><td>3.0</td><td>85.5</td><td>87.4</td><td>88.4</td><td>88.4</td><td>88.0</td></tr><tr><td>3.3</td><td>85.0</td><td>86.8</td><td>88.1</td><td>88.4</td><td>87.7</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] | 0.0 | - | - | - | - | - | 0.6 | 79.7 | 78.1 | 75.8 | 73.5 | 69.7 | 1.2 | 86.5 | 86.3 | 85.0 | 84.0 | 81.8 | 1.8 | 87.3 | 88.0 | 88.1 | 87.7 | 86.0 | 2.4 | 86.8 | 88.0 | 88.6 | 88.6 | 87.9 | 3.0 | 85.5 | 87.4 | 88.4 | 88.4 | 88.0 | 3.3 | 85.0 | 86.8 | 88.1 | 88.4 | 87.7 | -- | - | - | - | - | - | -- | - | - | - | - | - | -- | - | - | - | - | - | -- | - | - | - | - | - |
| Load Current [A] | Efficiency [%] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0 | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.6 | 79.7 | 78.1 | 75.8 | 73.5 | 69.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.2 | 86.5 | 86.3 | 85.0 | 84.0 | 81.8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.8 | 87.3 | 88.0 | 88.1 | 87.7 | 86.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.4 | 86.8 | 88.0 | 88.6 | 88.6 | 87.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.0 | 85.5 | 87.4 | 88.4 | 88.4 | 88.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.3 | 85.0 | 86.8 | 88.1 | 88.4 | 87.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

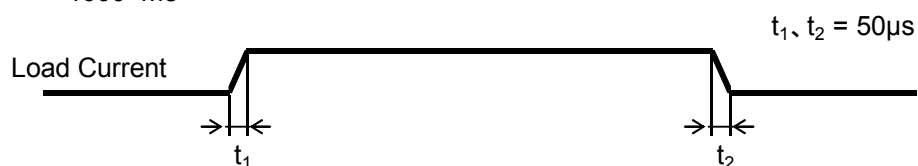
| Model | MGFS152405 | Temperature 25°C Testing Circuitry Figure A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-----------------------------|--|-----------------------------|------------------------------|-----|-------|-------|-----|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|--|--|
| Item | Line Regulation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | +5V3A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div><div>-----□----- Load 50%</div><div>-----△----- Load 100%</div></div><table><thead><tr><th>Input Voltage [V]</th><th>Output Voltage [V] Load 50%</th><th>Output Voltage [V] Load 100%</th></tr></thead><tbody><tr><td>8.5</td><td>5.062</td><td>5.061</td></tr><tr><td>9.0</td><td>5.062</td><td>5.061</td></tr><tr><td>12.0</td><td>5.062</td><td>5.061</td></tr><tr><td>15.0</td><td>5.062</td><td>5.061</td></tr><tr><td>18.0</td><td>5.062</td><td>5.061</td></tr><tr><td>24.0</td><td>5.062</td><td>5.061</td></tr><tr><td>30.0</td><td>5.061</td><td>5.061</td></tr><tr><td>36.0</td><td>5.061</td><td>5.061</td></tr><tr><td>40.0</td><td>5.061</td><td>5.061</td></tr></tbody></table></div> | | Input Voltage [V] | Output Voltage [V] Load 50% | Output Voltage [V] Load 100% | 8.5 | 5.062 | 5.061 | 9.0 | 5.062 | 5.061 | 12.0 | 5.062 | 5.061 | 15.0 | 5.062 | 5.061 | 18.0 | 5.062 | 5.061 | 24.0 | 5.062 | 5.061 | 30.0 | 5.061 | 5.061 | 36.0 | 5.061 | 5.061 | 40.0 | 5.061 | 5.061 | | |
| Input Voltage [V] | Output Voltage [V] Load 50% | Output Voltage [V] Load 100% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.5 | 5.062 | 5.061 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9.0 | 5.062 | 5.061 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12.0 | 5.062 | 5.061 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15.0 | 5.062 | 5.061 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18.0 | 5.062 | 5.061 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24.0 | 5.062 | 5.061 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30.0 | 5.061 | 5.061 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 36.0 | 5.061 | 5.061 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 40.0 | 5.061 | 5.061 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Note: Slanted line shows the range of the rated input voltage. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Model | MGFS152405 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--------------------|-------------------|---|-------------------|-------------------|------------------|--------------------|--|--|--|--|------------------|-------------------|-------------------|-------------------|-------------------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|----|---|---|---|---|---|----|---|---|---|---|---|----|---|---|---|---|---|----|---|---|---|---|---|
| Item | Load Regulation | | Temperature | 25°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | Testing Circuitry | Figure A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | +5V3A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div><div><div><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></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>0.0</td><td>5.063</td><td>5.063</td><td>5.062</td><td>5.062</td><td>5.062</td></tr><tr><td>0.6</td><td>5.063</td><td>5.063</td><td>5.062</td><td>5.062</td><td>5.062</td></tr><tr><td>1.2</td><td>5.062</td><td>5.062</td><td>5.062</td><td>5.062</td><td>5.062</td></tr><tr><td>1.8</td><td>5.062</td><td>5.062</td><td>5.062</td><td>5.062</td><td>5.061</td></tr><tr><td>2.4</td><td>5.061</td><td>5.061</td><td>5.061</td><td>5.061</td><td>5.061</td></tr><tr><td>3.0</td><td>5.061</td><td>5.061</td><td>5.061</td><td>5.061</td><td>5.061</td></tr><tr><td>3.3</td><td>5.061</td><td>5.061</td><td>5.061</td><td>5.061</td><td>5.060</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] | 0.0 | 5.063 | 5.063 | 5.062 | 5.062 | 5.062 | 0.6 | 5.063 | 5.063 | 5.062 | 5.062 | 5.062 | 1.2 | 5.062 | 5.062 | 5.062 | 5.062 | 5.062 | 1.8 | 5.062 | 5.062 | 5.062 | 5.062 | 5.061 | 2.4 | 5.061 | 5.061 | 5.061 | 5.061 | 5.061 | 3.0 | 5.061 | 5.061 | 5.061 | 5.061 | 5.061 | 3.3 | 5.061 | 5.061 | 5.061 | 5.061 | 5.060 | -- | - | - | - | - | - | -- | - | - | - | - | - | -- | - | - | - | - | - | -- | - | - | - | - | - |
| 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] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0 | 5.063 | 5.063 | 5.062 | 5.062 | 5.062 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.6 | 5.063 | 5.063 | 5.062 | 5.062 | 5.062 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.2 | 5.062 | 5.062 | 5.062 | 5.062 | 5.062 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.8 | 5.062 | 5.062 | 5.062 | 5.062 | 5.061 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.4 | 5.061 | 5.061 | 5.061 | 5.061 | 5.061 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.0 | 5.061 | 5.061 | 5.061 | 5.061 | 5.061 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.3 | 5.061 | 5.061 | 5.061 | 5.061 | 5.060 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Note: Slanted line shows the range of the rated load current.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



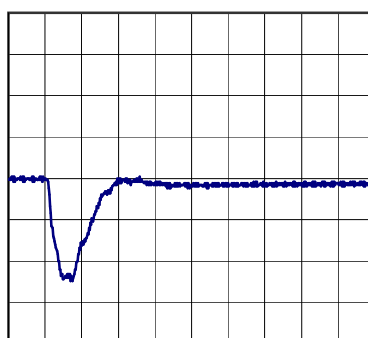
| | | |
|--------|-----------------------|--|
| Model | MGFS152405 | Temperature 25°C Testing Circuitry Figure A |
| Item | Dynamic Load Response | |
| Object | +5V3A | |

Input Volt. 24 V
Cycle 1000 ms

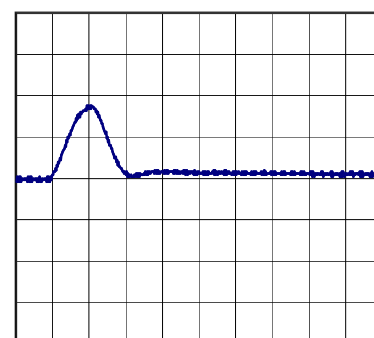


Min. Load (0A) \longleftrightarrow
Load 100% (3A)

100mV/div



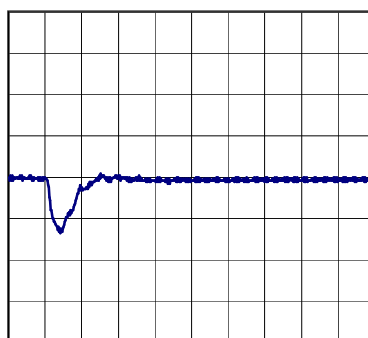
50µs/div



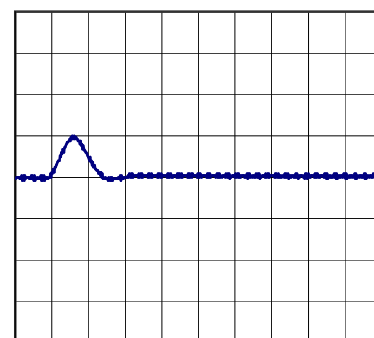
50µs/div

Min. Load (0A) \longleftrightarrow
Load 50% (1.5A)

100mV/div



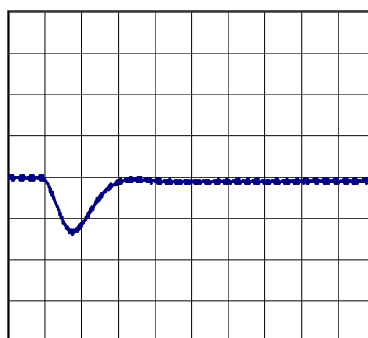
50µs/div



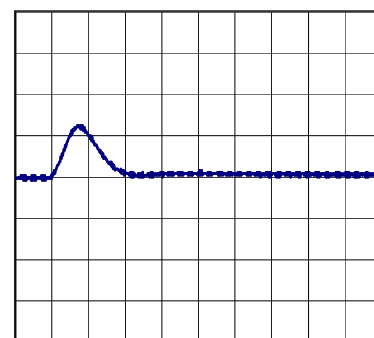
50µs/div

Load 50% (1.5A) \longleftrightarrow
Load 100% (3A)

100mV/div

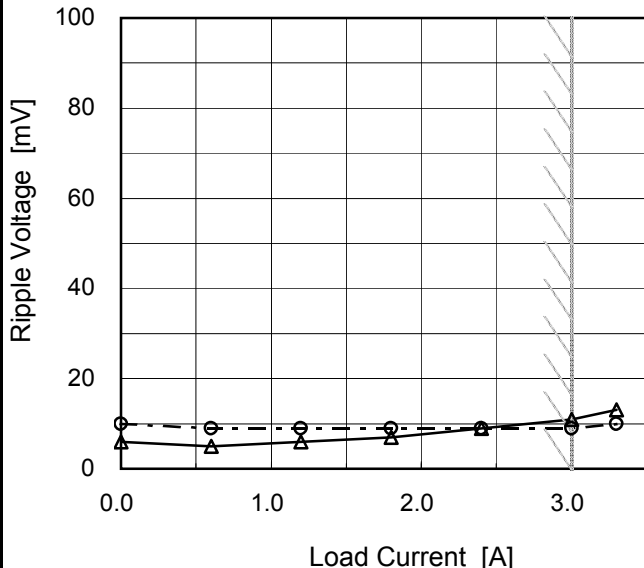
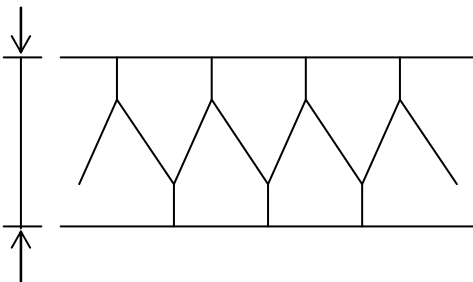


50µs/div



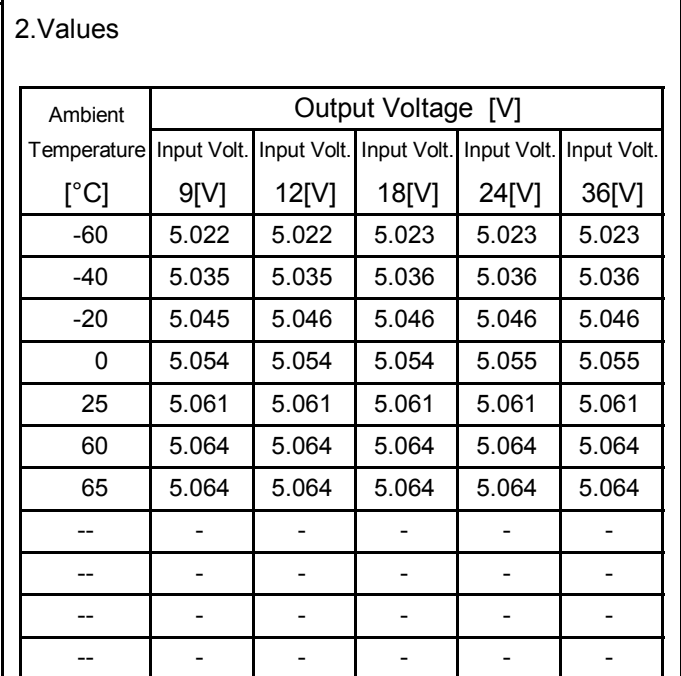
50µs/div

| | | | |
|---------|--|----------------------------------|--|
| Model | | MGFS152405 | |
| Item | | Ripple Voltage (by Load Current) | |
| Object | | +5V3A | |
| 1.Graph | | 2.Values | |

| Model | MGFS152405 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------|--|----------|------------------|-------------------|--|-------------------|--------------------|-----|---|----|-----|---|---|-----|---|---|-----|---|---|-----|---|---|-----|----|---|-----|----|----|----|---|---|----|---|---|----|---|---|----|---|---|
| Item | Ripple-Noise | Temperature | 25°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Testing Circuitry | Figure B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | +5V3A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div><div>—△— Input Volt. 9V</div><div>- -○- - Input Volt. 36V</div></div></div> <div>Measured by 100 MHz Oscilloscope. Ripple-Noise is shown as p-p in the figure below. Note: Slanted line shows the range of the rated load current.</div> <div><div><div>Ripple Noise[mVp-p]</div></div><div>Fig.Complex Ripple Noise Wave Form</div></div> | | <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>0.0</td><td>6</td><td>10</td></tr><tr><td>0.6</td><td>5</td><td>9</td></tr><tr><td>1.2</td><td>6</td><td>9</td></tr><tr><td>1.8</td><td>7</td><td>9</td></tr><tr><td>2.4</td><td>9</td><td>9</td></tr><tr><td>3.0</td><td>11</td><td>9</td></tr><tr><td>3.3</td><td>13</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-Noise [mV] | | Input Volt. 9 [V] | Input Volt. 36 [V] | 0.0 | 6 | 10 | 0.6 | 5 | 9 | 1.2 | 6 | 9 | 1.8 | 7 | 9 | 2.4 | 9 | 9 | 3.0 | 11 | 9 | 3.3 | 13 | 10 | -- | - | - | -- | - | - | -- | - | - | -- | - | - |
| Load Current [A] | Ripple-Noise [mV] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Input Volt. 9 [V] | Input Volt. 36 [V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0 | 6 | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.6 | 5 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.2 | 6 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.8 | 7 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.4 | 9 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.0 | 11 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.3 | 13 | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | Testing Circuitry Figure B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-----------------------------------|--|--------------------------|---------------------|--|----------|-----------|-----|----|----|-----|---|----|-----|---|----|---|---|----|----|---|---|----|---|---|----|---|---|----|---|---|----|---|---|----|---|---|----|---|---|
| Model | MGFS152405 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Item | Ripple Voltage (by Ambient Temp.) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | +5V3A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>1.Graph</p> <p>---□--- Load 50% —△— Load 100%</p> <p>Ripple Voltage [mV]</p> <p>Ambient Temperature [°C]</p> <p>Input Volt. 24V</p> <p>Measured by 100 MHz Oscilloscope. Note: Slanted line shows the range of the rated ambient temperature.</p> | | <p>2.Values</p> <table> <tr> <th rowspan="2">Ambient Temperature [°C]</th><th colspan="2">Ripple Voltage [mV]</th></tr> <tr> <th>Load 50%</th><th>Load 100%</th></tr> <tr><td>-60</td><td>10</td><td>12</td></tr> <tr><td>-40</td><td>9</td><td>11</td></tr> <tr><td>-20</td><td>8</td><td>10</td></tr> <tr><td>0</td><td>8</td><td>10</td></tr> <tr><td>25</td><td>7</td><td>9</td></tr> <tr><td>60</td><td>7</td><td>9</td></tr> <tr><td>65</td><td>7</td><td>9</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> | Ambient Temperature [°C] | Ripple Voltage [mV] | | Load 50% | Load 100% | -60 | 10 | 12 | -40 | 9 | 11 | -20 | 8 | 10 | 0 | 8 | 10 | 25 | 7 | 9 | 60 | 7 | 9 | 65 | 7 | 9 | -- | - | - | -- | - | - | -- | - | - | -- | - | - |
| Ambient Temperature [°C] | Ripple Voltage [mV] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Load 50% | Load 100% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -60 | 10 | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -40 | 9 | 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -20 | 8 | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 8 | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | 7 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 60 | 7 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 65 | 7 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Testing Circuitry Figure A



BC-10452



| | | | |
|------------------|-------------------------|--|-------------------------------|
| <div>COJEC</div> | | | |
| Model | MGFS152405 | | |
| Item | Output Voltage Accuracy | | Testing Circuitry Figure A |
| Object | +5V3A | | |

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 - 60°C

Input Voltage : 9 - 36V

Load Current : 0 - 3A

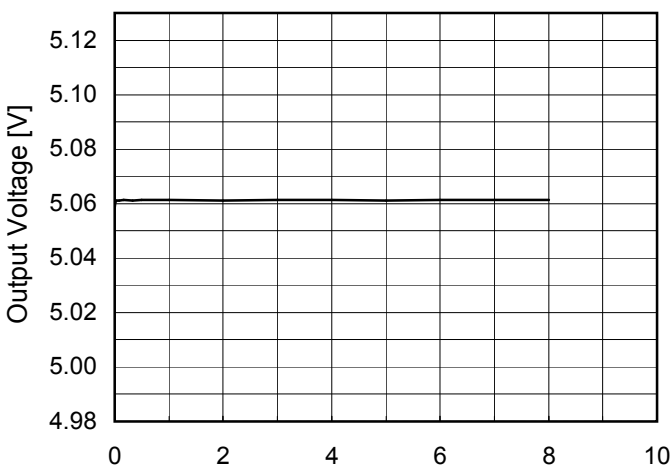
* Output Voltage Accuracy = $\pm(\text{Maximum of Output Voltage} - \text{Minimum of Output Voltage}) / 2$

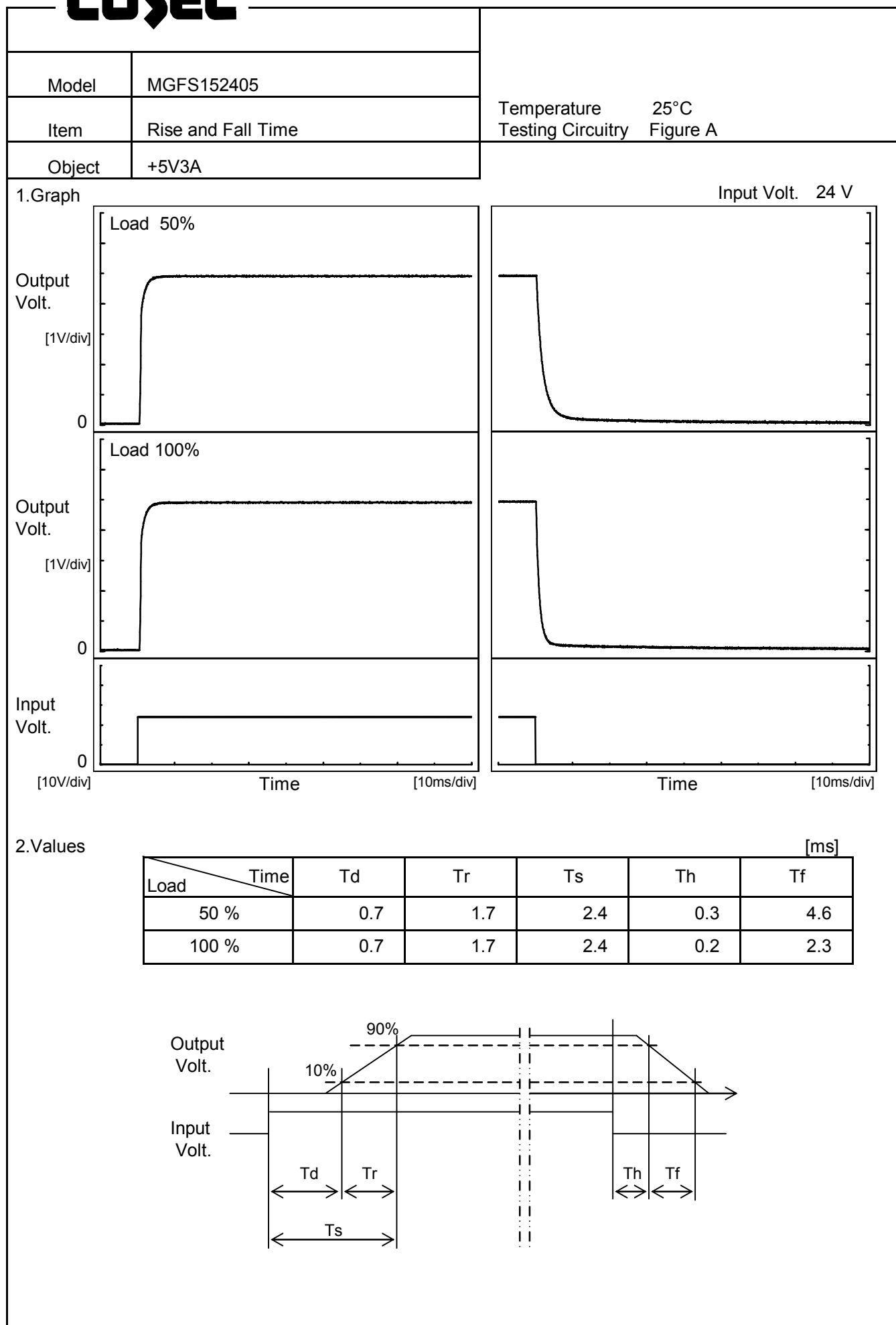
* Output Voltage Accuracy (Ratio) = $\frac{\text{Output Voltage Accuracy}}{\text{Rated Output Voltage}} \times 100$

2. Values

| Item | Temperature [°C] | Input Voltage[V] | Output | | Output Voltage Accuracy | |
|-----------------|---------------------|---------------------|------------|------------|-------------------------|-----------|
| | | | Current[A] | Voltage[V] | Value [mV] | Ratio [%] |
| Maximum Voltage | 60 | 9 | 0 | 5.066 | ±16 | ±0.3 |
| Minimum Voltage | -40 | 36 | 0 | 5.035 | | |



| Model | MGFS152405 | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--------------------|--|----------|----------------------|--------------------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| Item | Time Lapse Drift | Temperature | 25°C | | | | | | | | | | | | | | | | | | | | | | |
| | | Testing Circuitry | Figure A | | | | | | | | | | | | | | | | | | | | | | |
| Object | +5V3A | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | |
| <div><p>Output Voltage [V]</p><p>Time [H]</p><p>Input Volt. 24V</p><p>Load 100%</p></div> | | <table><tr><th>Time since start [H]</th><th>Output Voltage [V]</th></tr><tr><td>0.0</td><td>5.059</td></tr><tr><td>0.5</td><td>5.061</td></tr><tr><td>1.0</td><td>5.061</td></tr><tr><td>2.0</td><td>5.061</td></tr><tr><td>3.0</td><td>5.061</td></tr><tr><td>4.0</td><td>5.061</td></tr><tr><td>5.0</td><td>5.061</td></tr><tr><td>6.0</td><td>5.061</td></tr><tr><td>7.0</td><td>5.061</td></tr><tr><td>8.0</td><td>5.061</td></tr></table> | | Time since start [H] | Output Voltage [V] | 0.0 | 5.059 | 0.5 | 5.061 | 1.0 | 5.061 | 2.0 | 5.061 | 3.0 | 5.061 | 4.0 | 5.061 | 5.0 | 5.061 | 6.0 | 5.061 | 7.0 | 5.061 | 8.0 | 5.061 |
| Time since start [H] | Output Voltage [V] | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0 | 5.059 | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.5 | 5.061 | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.0 | 5.061 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.0 | 5.061 | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.0 | 5.061 | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.0 | 5.061 | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.0 | 5.061 | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.0 | 5.061 | | | | | | | | | | | | | | | | | | | | | | | | |
| 7.0 | 5.061 | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.0 | 5.061 | | | | | | | | | | | | | | | | | | | | | | | | |



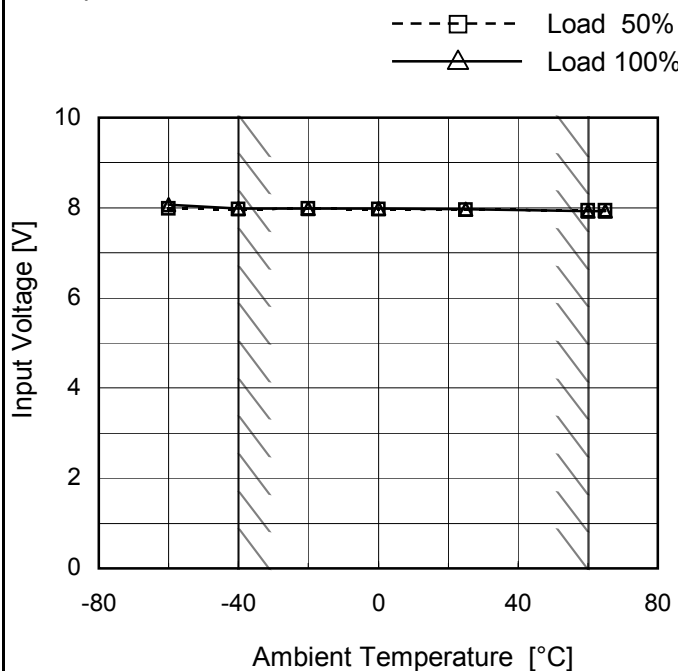
Model MGFS152405

Item Minimum Input Voltage
for Regulated Output Voltage

Object +5V3A

Testing Circuitry Figure A

1. Graph



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

2. Values

| Ambient Temperature [°C] | Input Voltage [V] | |
|-----------------------------|----------------------|-----------|
| | Load 50% | Load 100% |
| -60 | 8.0 | 8.1 |
| -40 | 8.0 | 8.0 |
| -20 | 8.0 | 8.0 |
| 0 | 8.0 | 8.0 |
| 25 | 8.0 | 8.0 |
| 60 | 8.0 | 8.0 |
| 65 | 8.0 | 8.0 |
| -- | - | - |
| -- | - | - |
| -- | - | - |
| -- | - | - |

BC-10452

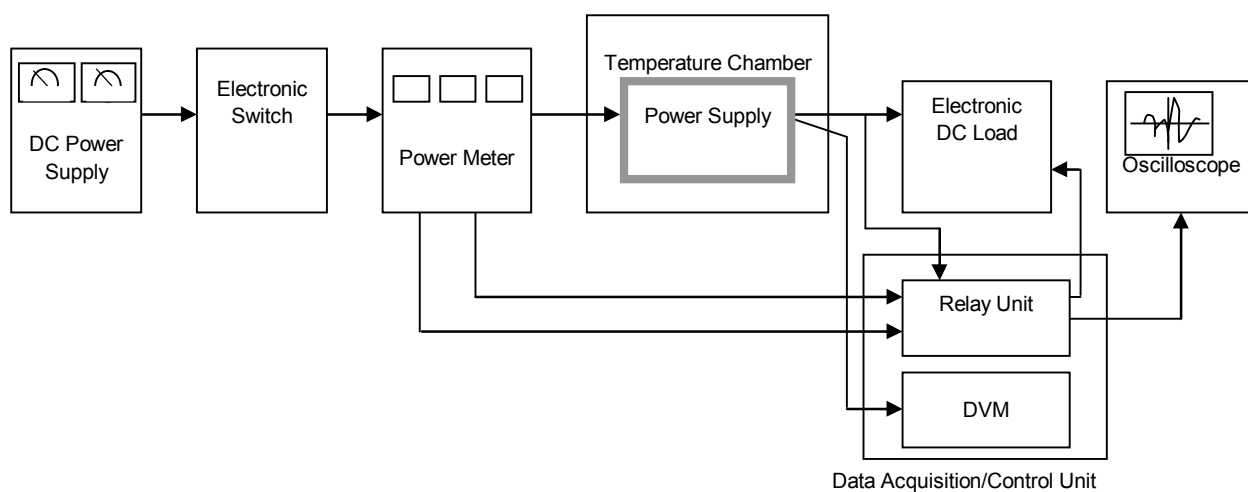


Figure A

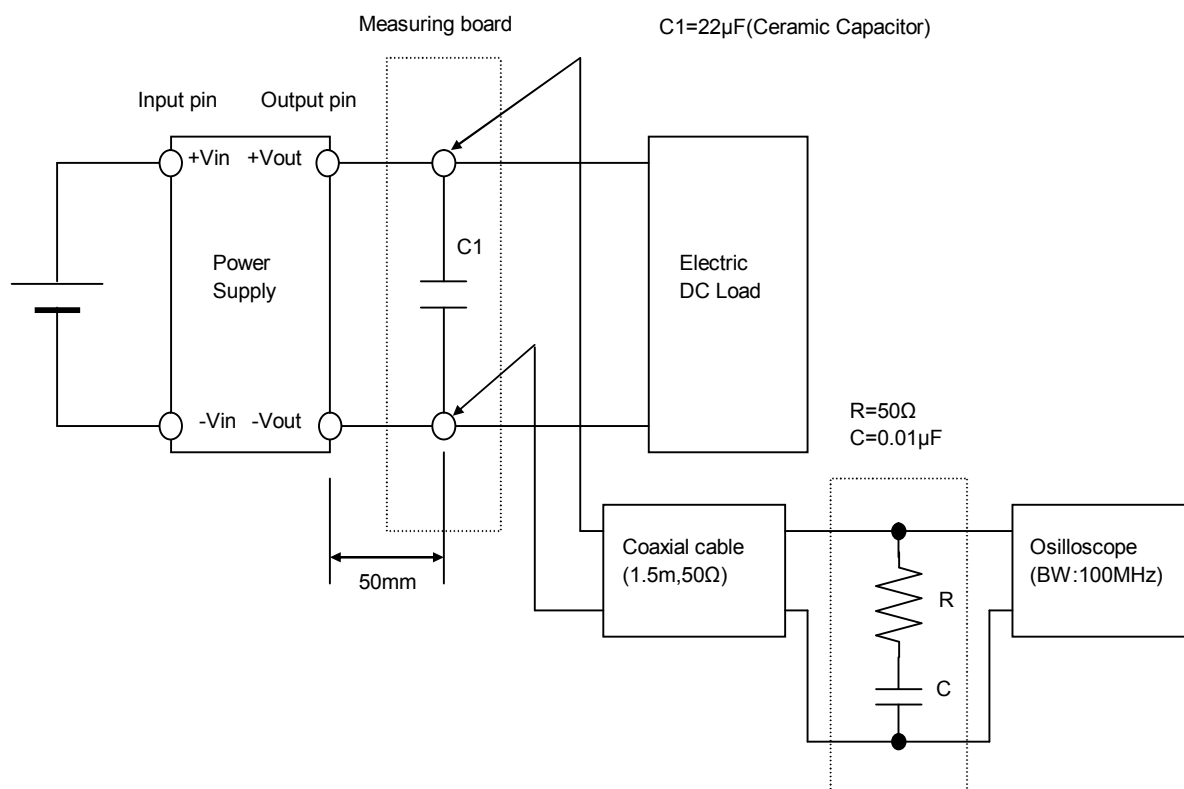


Figure B (Ripple and Ripple noise Characteristic)