

| DATA SHEET  |  |                           |                                 |                     |                    |           | Date   | 12-Oct-07        |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
|---|--|---------------------------|---------------------------------|---------------------|--------------------|-----------|--|------------------|-------------------|-----------------|-----------------|-----------------------------|---------------------------|-----------------------|---------------------|--------------------|-----------|--------------------|------------------|-------------------|-----------------|---------|------|------|-----|-------|------|----|-----|-------|------|------|---------|------|------|------|-------|------|-----|-----|-------|------|------|---------|------|------|------|------|------|-----|-----|-------|------|------|
| Model   | SFS15483R3                                 |                           |                                 |                     |                    |           | Temp.  | 25 degreeC       |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| Test  | EMI<br>Line conduction & Radiated emission |                           |                                 |                     |                    |           | Humid.   | 45 %RH           |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
|   |  |                           |                                 |                     |                    |           | Tested by  | Y.Miyawaki       |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| LINE CONDUCTION   |  |                           |                                 |                     |                    |           |  |                  |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| Model Name : SFS15483R3   |  |                           | Temp. : 25degreeC               |                     |                    |           |  |                  |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| Model No. :   |  |                           | Humi. : 45%                     |                     |                    |           |  |                  |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| Serial No. :  |  |                           | Date : 2007/10/12 10:12         |                     |                    |           |  |                  |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| Points : 3  |  |                           | Test Equip. : R3132,ESPC        |                     |                    |           |  |                  |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| Detector : PEAK/QP/Ave.   |  |                           | Load Line : 100mm               |                     |                    |           |  |                  |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| Line Mode : VA/VB   |  |                           | Comment : Vo = 3.3V , Io = 4.5A |                     |                    |           |  |                  |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| Power Supply : DC 48V   |  |                           |                                 |                     |                    |           |  |                  |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| Limit1: [CISPR Pub11] Class A Gr.1(QP)  |  |                           |                                 |                     |                    |           |  |                  |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| Limit2: [CISPR Pub11] Class A Gr.1(Ave.)  |  |                           |                                 |                     |                    |           |  |                  |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
|   |  |                           |                                 |                     |                    |           | Limit1(QP)<br>Limit2(Ave.)<br>VA(PEAK)<br>VB(PEAK)<br>VA(QP)<br>VA(Ave.)<br>VB(QP)<br>VB(Ave.) |                  |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| <table><tr><th>Frequency [MHz]</th><th>Meter Reading (Ave.) [dBuV]</th><th>Meter Reading (QP) [dBuV]</th><th>Factor [dB]</th><th>Level(Ave.) [dBuV]</th><th>Level(QP) [dBuV]</th><th>Line</th><th>Limit(Ave.) [dBuV]</th><th>Limit(QP) [dBuV]</th><th>Margin(Ave.) [dB]</th><th>Margin(QP) [dB]</th></tr><tr><td>0.5783</td><td>36.5</td><td>36.2</td><td>9.9</td><td>46.4</td><td>46.1</td><td>VA</td><td>60</td><td>73</td><td>13.6</td><td>26.9</td></tr><tr><td>20.2565</td><td>30.6</td><td>30.9</td><td>10.3</td><td>40.9</td><td>41.2</td><td>VA</td><td>60</td><td>73</td><td>19.1</td><td>31.8</td></tr><tr><td>0.173</td><td>24.9</td><td>30.5</td><td>9.8</td><td>34.7</td><td>40.3</td><td>VB</td><td>66</td><td>79</td><td>31.3</td><td>38.7</td></tr></table> |  |                           |                                 |                     |                    |           |  |                  |                   |                 | Frequency [MHz] | Meter Reading (Ave.) [dBuV] | Meter Reading (QP) [dBuV] | Factor [dB]           | Level(Ave.) [dBuV]  | Level(QP) [dBuV]   | Line      | Limit(Ave.) [dBuV] | Limit(QP) [dBuV] | Margin(Ave.) [dB] | Margin(QP) [dB] | 0.5783  | 36.5 | 36.2 | 9.9 | 46.4  | 46.1 | VA | 60  | 73    | 13.6 | 26.9 | 20.2565 | 30.6 | 30.9 | 10.3 | 40.9  | 41.2 | VA  | 60  | 73    | 19.1 | 31.8 | 0.173   | 24.9 | 30.5 | 9.8  | 34.7 | 40.3 | VB  | 66  | 79    | 31.3 | 38.7 |
| Frequency [MHz]   | Meter Reading (Ave.) [dBuV]                | Meter Reading (QP) [dBuV] | Factor [dB]                     | Level(Ave.) [dBuV]  | Level(QP) [dBuV]   | Line      | Limit(Ave.) [dBuV]   | Limit(QP) [dBuV] | Margin(Ave.) [dB] | Margin(QP) [dB] |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| 0.5783  | 36.5                                       | 36.2                      | 9.9                             | 46.4                | 46.1               | VA        | 60   | 73               | 13.6              | 26.9            |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| 20.2565   | 30.6                                       | 30.9                      | 10.3                            | 40.9                | 41.2               | VA        | 60   | 73               | 19.1              | 31.8            |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| 0.173   | 24.9                                       | 30.5                      | 9.8                             | 34.7                | 40.3               | VB        | 66   | 79               | 31.3              | 38.7            |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| RADIATED EMISSION   |  |                           |                                 |                     |                    |           |  |                  |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| Model Name : SFS15483R3   |  |                           | Temp. : 25degreeC               |                     |                    |           |  |                  |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| Model No. :   |  |                           | Humi. : 45%                     |                     |                    |           |  |                  |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| Serial No. :  |  |                           | Date : 2007/10/12 10:21         |                     |                    |           |  |                  |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| Points : 3  |  |                           | Test Equip. : R3132,ESPC        |                     |                    |           |  |                  |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| Detector : PEAK/QP  |  |                           | Load Line : 100mm               |                     |                    |           |  |                  |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| Polarization : Vertical   |  |                           | Comment : Vo = 3.3V , Io = 4.5A |                     |                    |           |  |                  |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| Power Supply : DC 48V   |  |                           |                                 |                     |                    |           |  |                  |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| Limit: [CISPR 11] Class A Group 1<3m>   |  |                           |                                 |                     |                    |           |  |                  |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
|   |  |                           |                                 |                     |                    |           | Limit(QP)<br>Horizontal(PEAK)<br>Vertical(PEAK)<br>Vertical(QP)                                |                  |                   |                 |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| <table><tr><th>Frequency [MHz]</th><th>MeterReading (QP) [dBuV]</th><th>Ant. Type</th><th>Antenna Factor [dB/m]</th><th>Cable &amp; Preamp [dB]</th><th>Level(QP) [dBuV/m]</th><th>Angle [°]</th><th>Height [cm]</th><th>Polar.</th><th>Limit [dBuV/m]</th><th>Margin [dB]</th></tr><tr><td>122.914</td><td>44.6</td><td>BL</td><td>11</td><td>-31.7</td><td>23.9</td><td>4</td><td>156</td><td>Vert.</td><td>50</td><td>26.1</td></tr><tr><td>206.355</td><td>50.1</td><td>BL</td><td>8.6</td><td>-31.3</td><td>27.4</td><td>232</td><td>126</td><td>Vert.</td><td>50</td><td>22.6</td></tr><tr><td>272.467</td><td>56.3</td><td>BL</td><td>12.5</td><td>-31</td><td>37.8</td><td>222</td><td>103</td><td>Vert.</td><td>57</td><td>19.2</td></tr></table>                  |  |                           |                                 |                     |                    |           |  |                  |                   |                 | Frequency [MHz] | MeterReading (QP) [dBuV]    | Ant. Type                 | Antenna Factor [dB/m] | Cable & Preamp [dB] | Level(QP) [dBuV/m] | Angle [°] | Height [cm]        | Polar.           | Limit [dBuV/m]    | Margin [dB]     | 122.914 | 44.6 | BL   | 11  | -31.7 | 23.9 | 4  | 156 | Vert. | 50   | 26.1 | 206.355 | 50.1 | BL   | 8.6  | -31.3 | 27.4 | 232 | 126 | Vert. | 50   | 22.6 | 272.467 | 56.3 | BL   | 12.5 | -31  | 37.8 | 222 | 103 | Vert. | 57   | 19.2 |
| Frequency [MHz]   | MeterReading (QP) [dBuV]                   | Ant. Type                 | Antenna Factor [dB/m]           | Cable & Preamp [dB] | Level(QP) [dBuV/m] | Angle [°] | Height [cm]  | Polar.           | Limit [dBuV/m]    | Margin [dB]     |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| 122.914   | 44.6                                       | BL                        | 11                              | -31.7               | 23.9               | 4         | 156  | Vert.            | 50                | 26.1            |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| 206.355   | 50.1                                       | BL                        | 8.6                             | -31.3               | 27.4               | 232       | 126  | Vert.            | 50                | 22.6            |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |
| 272.467   | 56.3                                       | BL                        | 12.5                            | -31                 | 37.8               | 222       | 103  | Vert.            | 57                | 19.2            |                 |                             |                           |                       |                     |                    |           |                    |                  |                   |                 |         |      |      |     |       |      |    |     |       |      |      |         |      |      |      |       |      |     |     |       |      |      |         |      |      |      |      |      |     |     |       |      |      |

| DATA SHEET |  | Date      | 12-Oct-07  |
|------------|--|-----------|------------|
| Model      | SFS15483R3                                 | Temp.     | 25 degreeC |
| Test       | EMI<br>Line conduction & Radiated emission | Humid.    | 45 %RH     |
|            |  | Tested by | Y.Miyawaki |

1.Conditions

(1)Photograph of Test Set-Up

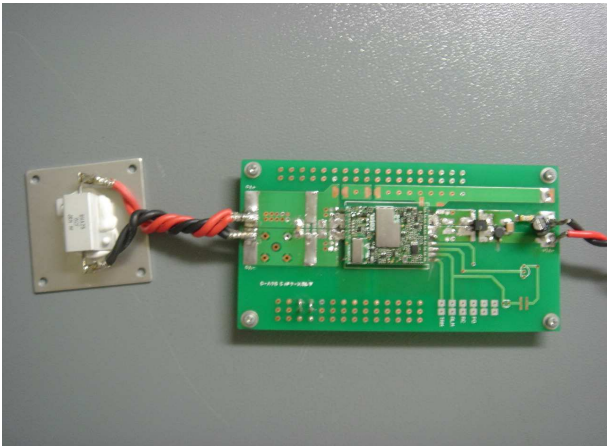
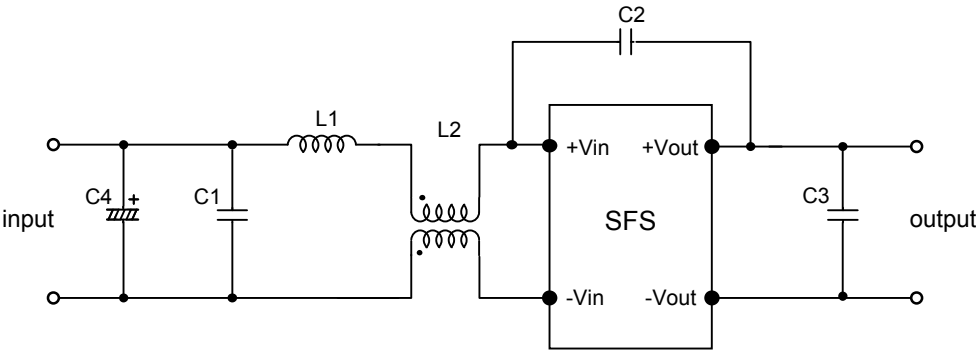


Fig1. Photograph of Test Set-Up

(2)Testing circuitry



- C1: 1 $\mu$ F 100V Ceramic capacitor

C2: 2200pF 630V Ceramic capacitor

C3: 22 $\mu$ F 16V Ceramic capacitor

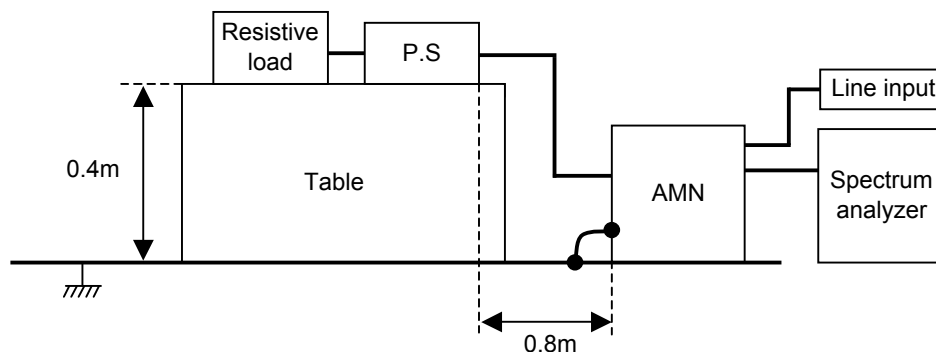
C4: 10 $\mu$ F 100V Electric capacitor
- L1: 1 $\mu$ H 2.4A Inductor

L2: ZJYS51R5-2PT : TDK

Fig2. Testing circuitry

| DATA SHEET |  | Date      | 12-Oct-07  |
|------------|--|-----------|------------|
| Model      | Circuit used for measurement               | Temp.     | 25 degreeC |
| Test       | EMI<br>Line conduction & Radiated emission | Humid.    | 45 %RH     |
|            |  | Tested by | Y.Miyawaki |

## 1. Line conduction



## 2. Radiated emission

