

| DATA SHEET | | | | | | | Date | 04-Oct-07 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|---------------------------|---------------------------------|---------------------|--------------------|-----------|--------------------------------------------------------------------------|------------------|-------------------|-----------------|-----------------|-----------------------------|---------------------------|-----------------------|---------------------|--------------------|-----------|--------------------|------------------|-------------------|-----------------|--------|------|------|-----|-------|------|----|-----|-------|------|------|--------|------|------|-----|------|------|-----|-----|-------|------|------|---------|------|------|------|-------|------|-----|-----|-------|------|------|
| Model | SFS30482R5 | | | | | | Temp. | 25 degreeC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Test | EMI Line conduction & Radiated emission | | | | | | Humid. | 45 %RH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | Tested by | Y.Miyawaki | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LINE CONDUCTION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model Name : SFS30482R5 | | | Temp. : 25degreeC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model No. : | | | Humi. : 45% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Serial No. : | | | Date : 2007/10/4 16:46 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Points : 3 | | | Test Equip. : R3132,ESPC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Detector : PEAK/QP/Ave. | | | Load Line : 100mm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Line Mode : VA | | | Comment : Vo = 2.5V , Io = 9.0A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power Supply : DC 48V | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Limit1: [CISPR Pub11] Class A Gr.1(QP) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Limit2: [CISPR Pub11] Class A Gr.1(Ave.) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | Limit1(QP) Limit2(Ave.) VA(PEAK) VB(PEAK) VA(QP) VA(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>0.1775</td><td>24.6</td><td>29.6</td><td>9.8</td><td>34.4</td><td>39.4</td><td>VA</td><td>66</td><td>79</td><td>31.6</td><td>39.6</td></tr><tr><td>0.5001</td><td>29.7</td><td>29.9</td><td>9.9</td><td>39.6</td><td>39.8</td><td>VA</td><td>60</td><td>73</td><td>20.4</td><td>33.2</td></tr><tr><td>18.5137</td><td>39.2</td><td>38.9</td><td>10.2</td><td>49.4</td><td>49.1</td><td>VA</td><td>60</td><td>73</td><td>10.6</td><td>23.9</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] | 0.1775 | 24.6 | 29.6 | 9.8 | 34.4 | 39.4 | VA | 66 | 79 | 31.6 | 39.6 | 0.5001 | 29.7 | 29.9 | 9.9 | 39.6 | 39.8 | VA | 60 | 73 | 20.4 | 33.2 | 18.5137 | 39.2 | 38.9 | 10.2 | 49.4 | 49.1 | VA | 60 | 73 | 10.6 | 23.9 |
| 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] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.1775 | 24.6 | 29.6 | 9.8 | 34.4 | 39.4 | VA | 66 | 79 | 31.6 | 39.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.5001 | 29.7 | 29.9 | 9.9 | 39.6 | 39.8 | VA | 60 | 73 | 20.4 | 33.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18.5137 | 39.2 | 38.9 | 10.2 | 49.4 | 49.1 | VA | 60 | 73 | 10.6 | 23.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RADIATED EMISSION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model Name : SFS30482R5 | | | Temp. : 25degreeC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model No. : | | | Humi. : 45% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Serial No. : | | | Date : 2007/10/4 16:57 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Points : 3 | | | Test Equip. : R3132,ESPC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Detector : PEAK/QP | | | Load Line : 100mm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Polarization : Vertical | | | Comment : Vo = 2.5V , Io = 9.0A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power Supply : DC 48V | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Limit: [CISPR 11] Class A Group 1<3m> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | Limit(QP) Horizontal(PEAK) Vertical(PEAK) 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 & 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>77.137</td><td>57.3</td><td>BL</td><td>6.7</td><td>-31.9</td><td>32.1</td><td>91</td><td>116</td><td>Vert.</td><td>50</td><td>17.9</td></tr><tr><td>64.629</td><td>61.1</td><td>BL</td><td>4.8</td><td>-32</td><td>33.9</td><td>314</td><td>119</td><td>Vert.</td><td>50</td><td>16.1</td></tr><tr><td>260.058</td><td>54.8</td><td>BL</td><td>13.7</td><td>-31.1</td><td>37.4</td><td>198</td><td>136</td><td>Vert.</td><td>57</td><td>19.6</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] | 77.137 | 57.3 | BL | 6.7 | -31.9 | 32.1 | 91 | 116 | Vert. | 50 | 17.9 | 64.629 | 61.1 | BL | 4.8 | -32 | 33.9 | 314 | 119 | Vert. | 50 | 16.1 | 260.058 | 54.8 | BL | 13.7 | -31.1 | 37.4 | 198 | 136 | Vert. | 57 | 19.6 |
| 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] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 77.137 | 57.3 | BL | 6.7 | -31.9 | 32.1 | 91 | 116 | Vert. | 50 | 17.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 64.629 | 61.1 | BL | 4.8 | -32 | 33.9 | 314 | 119 | Vert. | 50 | 16.1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 260.058 | 54.8 | BL | 13.7 | -31.1 | 37.4 | 198 | 136 | Vert. | 57 | 19.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| DATA SHEET | | Date | 04-Oct-07 |
|------------|--------------------------------------------|-----------|------------|
| Model | SFS30482R5 | Temp. | 25 degreeC |
| Test | EMI Line conduction & Radiated emission | Humid. | 45 %RH |
| | | Tested by | Y.Miyawaki |

1.Conditions

(1)Photograph of Test Set-Up

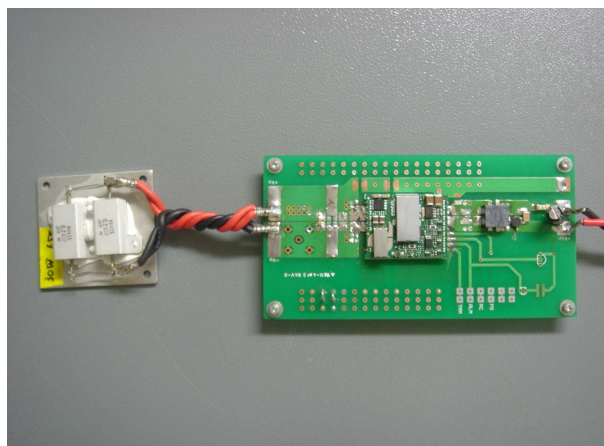
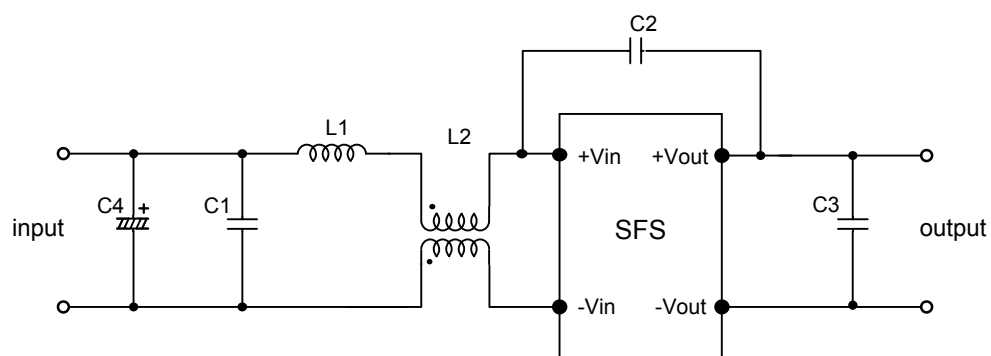


Fig1. Photograph of Test Set-Up

(2)Testing circuitry



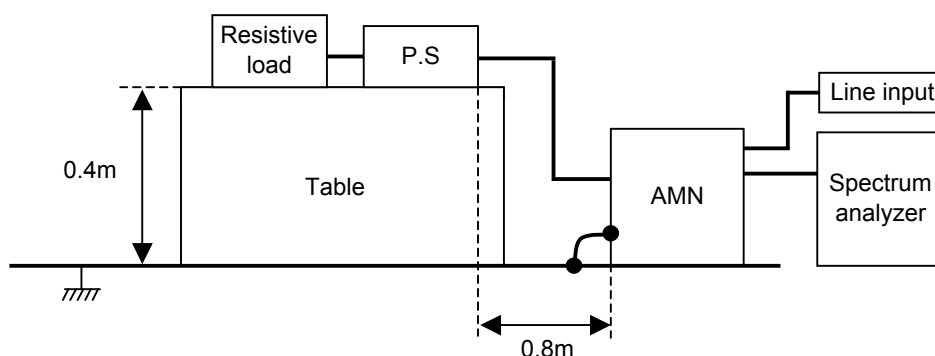
C1: 1 μ F 100V Ceramic capacitor
 C2: 2200pF 630V Ceramic capacitor
 C3: 22 μ F 16V Ceramic capacitor
 C4: 22 μ F 100V Electric capacitor

L1: 1 μ H 2.4A Inductor
 L2: ACM1211-102-2PL : TDK

Fig2. Testing circuitry

| DATA SHEET | | Date | 04-Oct-07 |
|------------|--------------------------------------------|-----------|------------|
| Model | Circuit used for measurement | Temp. | 25 degreeC |
| Test | EMI Line conduction & Radiated emission | Humid. | 45 %RH |
| | | Tested by | Y.Miyawaki |

1. Line conduction



2. Radiated emission

