

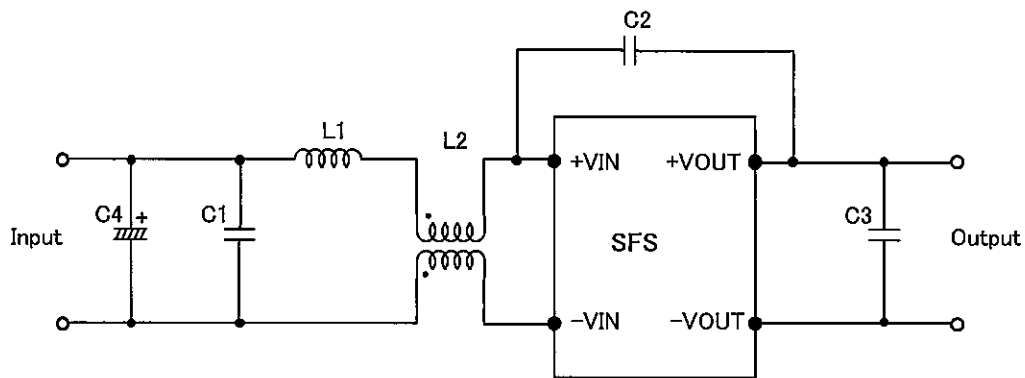
**SFS30 series EMI/EMS Test result**

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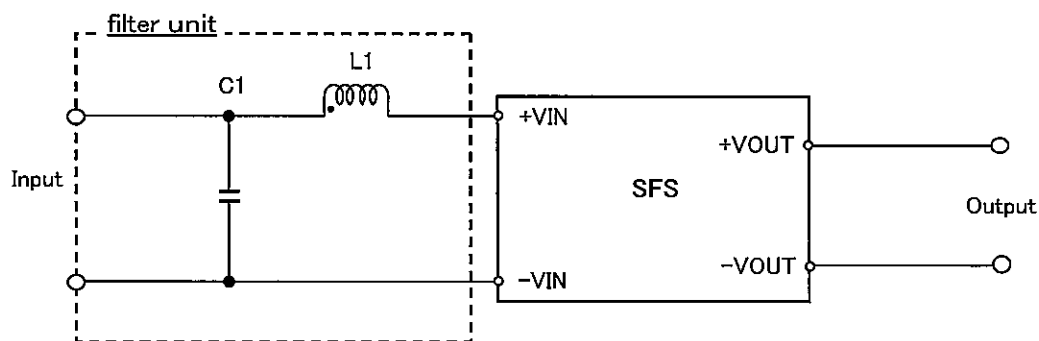
No.	Test item	Conditions	Conditions of Acceptability	Result
1	Line conduction	(1) Rated input (2) Rated load (3) Ambient temp. $25 \pm 10^{\circ}\text{C}$ (4) Testing circuitry Fig.1	(1)Meets the undermentioned standard. VCCI classA CISPR22 classA , EN55022-A	OK
2	Radiated emission	(1) Rated input (2) Rated load (3) Ambient temp. $25 \pm 10^{\circ}\text{C}$ (4) Testing circuitry Fig.1	(1)Meets the undermentioned standard. VCCI classA CISPR22 classA , EN55022-A	OK
3	Static electricity immunity test (EN61000-4-2)	(1) Rated input (2) Rated load (3) Ambient temp. $25 \pm 10^{\circ}\text{C}$ (4) Contact discharge voltage 8[kV] (EN61000-4-2 Level 4) (5) Testing circuitry Fig.2	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	OK
4	Radiated, radio-frequency, electromagnetic field immunity test (EN61000-4-3)	(1) Rated input (2) Rated load (3) Ambient temp. $25 \pm 10^{\circ}\text{C}$ (4)Testing field strength 10[V/m] (EN61000-4-3 Level 3) (5) Testing circuitry Fig.2	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	OK
5	Electrical fast transient/ burst immunity test (EN61000-4-4)	(1) Rated input (2) Rated load (3) Ambient temp. $25 \pm 10^{\circ}\text{C}$ (4) Test peak voltage 4[kV] (IEC61000-4-4 Level 4) (5) Testing circuitry Fig.2	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	OK
6	Surge immunity test (EN61000-4-5)	(1) Rated input(DC48V) (2) Rated load (3) Ambient temp. $25 \pm 10^{\circ}\text{C}$ (4) Test voltage Line to line 2[kV] (Level 3) (5) Testing circuitry Fig.3	(1)The power supply is not stop (2)Circuit does not malfunction. (3)No abnormality of the insulation destruction etc. (4)Parts are no damaged.	OK

○EMI/EMS testing circuitry



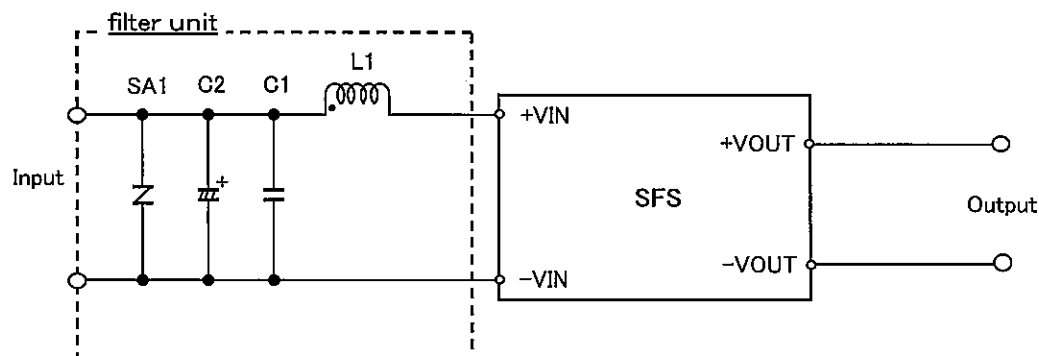
- C1 : 1  $\mu$ F 100V Ceramic capacitor
- C2 : 2200pF 630V Ceramic capacitor
- C3 : 12/15 0.1  $\mu$ F 50V Ceramic capacitor  
: Others 22  $\mu$ F 16V Ceramic capacitor
- C4 : SFS3024 68  $\mu$ F 80V Electric capacitor  
: SFS3048 22  $\mu$ F 100V Electric capacitor
- L1 : 1  $\mu$ H 2.4A Inductor
- L2 : ACM1211-102-2PL TDK or equivalent.

Fig.1 Testing circuitry (from No.1 and No.2)



- C1 : 1  $\mu$ F 100V Ceramic capacitor
- L1 : 1  $\mu$ H 2.8A Inductor

Fig.2 Testing circuitry (from No.3 to No.5)



- C1 : 1  $\mu$ F 100V Ceramic capacitor
- C2 : SFS3024 33  $\mu$ F 50V Electric capacitor  
: SFS3048 330  $\mu$ F 100V Electric capacitor
- L1 : 1  $\mu$ H 2.8A Inductor
- SA1 : SFS3024 ERZV10D470(PANASONIC CO.,LTD.)  
: SFS3048 ERZV10D101(PANASONIC CO.,LTD.) or equivalent.

Fig.3 Testing circuitry (No.6)