

Approved : *Yatunya Mono*Prepared : *Tetsuro Hirata*

No.	Test item	Conditions	Conditions of Acceptability	Result
1	Line conduction	(1) Rated input(DC110V/AC90V) (2) Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (4) Testing circuitry Fig.1	(1)Meets the undermentioned standard. FCC Part15 classB , VCCI classB CISPR22 classB , EN55022-B	OK
2	Radiated emission	(1) Rated input(DC110V/AC90V) (2) Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (4) Testing circuitry Fig.1	(1)Meets the undermentioned standard. FCC Part15 classB , VCCI classB CISPR22 classB , EN55022-B	OK
3	Static electricity immunity test (EN61000-4-2)	(1) Rated input(DC110V/AC90V) (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.1	(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(DC110V/AC90V) (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.1	(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(DC110V/AC90V) (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.1	(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(DC110V/AC90V) (2) Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (4) Test voltage Line to line 2[kV] (Level 3) Line to earth 4[kV] (Level 4) (5) Testing circuitry Fig.2	(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
7	Immunity to conducted disturbances, induced by radio-frequency fields (EN61000-4-6)	(1) Rated input(DC110V/AC90V) (2) Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (4) Voltage level (e.m.f.) 10[V] (Level 3) (5) Testing circuitry Fig.1	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure	OK

OEMI/EMS testing circuitry

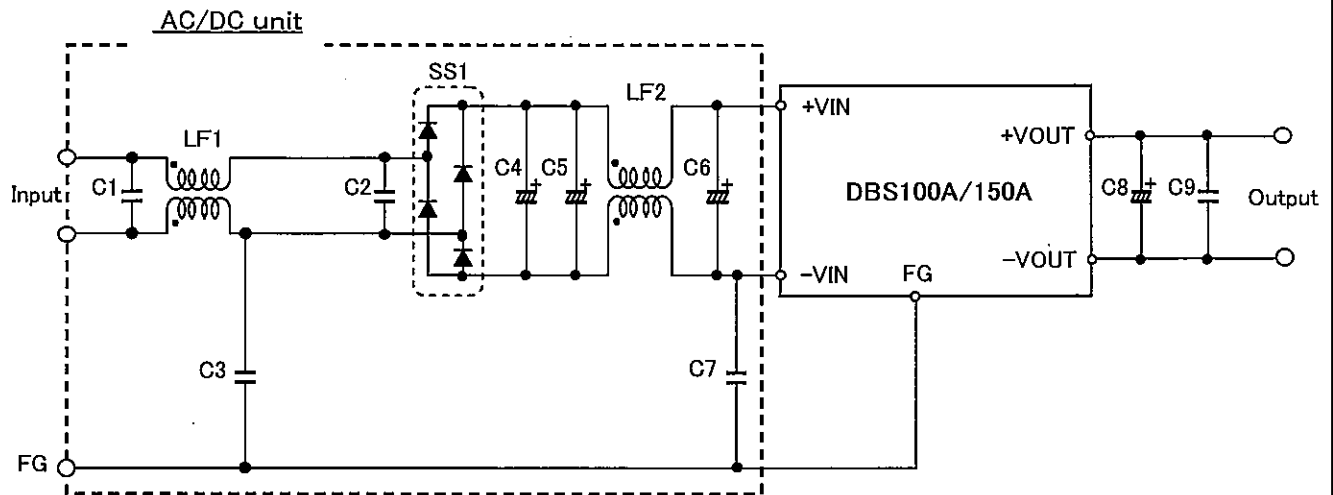


Fig.1 testing circuitry (from No.1 to No.5 ,No.7)

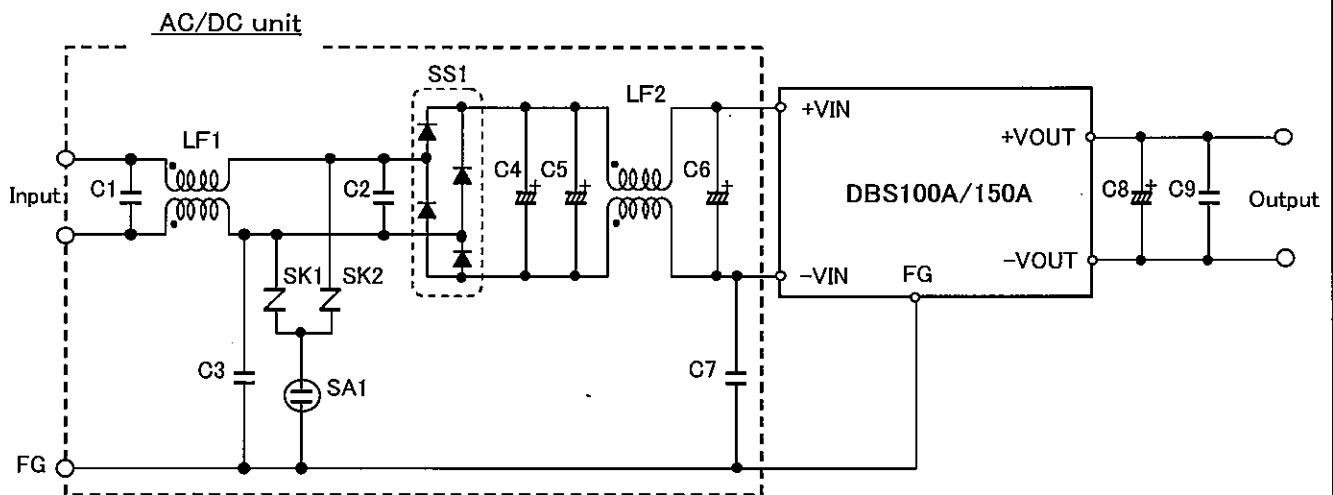


Fig.2 testing circuitry (No.6)

- | | | | |
|----------|--|----|---|
| C1 , C2 | : 0.47 μ F 250V Film capacitor | C8 | : 2200 μ F 10V Electric capacitor (DBS100A05) |
| C3 , C7 | : 3300pF 250V Ceramic capacitor | | : 1000 μ F 25V Electric capacitor |
| C4 , C5 | : 1000 μ F 250V Electric capacitor | | (DBS100A13R8/DBS150A12, 15) |
| C6 | : 47 μ F 250V Electric capacitor | | : 470 μ F 35V Electric capacitor (DBS150A24) |
| LF1 | : 2mH 5A Common mode Choke Coil | C9 | : 0.1 μ F 50V Film capacitor |
| LF2 | : 1mH 5A Common mode Choke Coil | | |
| SA1 | : DSA302 (MITSUBISHI MATERIALS CORP ADVANCED PRODUCTS) | | |
| SK1, SK2 | : ERZV10D271(PANASONIC CO LTD) | | |
| SS1 | : 25A 600V Bridge diode | | or equivalent. |