参考資料

COSEL

DPG series EMI/EMS Test result

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OS DESIGN DEPT.

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No.	Test item	Conditions	Conditions of Acceptability	Result
1	Line conduction	(1) Rated input AC230V (2) Rated load (3) Ambient temp. 25±10℃ (4) Testing circuitry Fig.1	(1)Meets the undermentioned standard. FCC Part15 classB , VCCI classB CISPR22 classB , EN55022-B EN55011-B	ok
2	Radiated emission	(1) Rated input AC230V (2) Rated load (3) Ambient temp. 25±10℃ (4) Testing circuitry Fig.1	(1)Meets the undermentioned standard. FCC Part15 classB , VCCI classB CISPR22 classB , EN55022-B EN55011-B	ok
3	Harmonic current (EN61000-3-2)	(1) Rated input AC230V (2) Rated load (3) Ambient temp. 25±10℃ (4) Testing circuitry Fig.1	(1)Meets the undermentioned standard. EN61000-3-2 classA	ok
4	Static electricity immunity test (EN61000-4-2)	(1) Rated input AC230V (2) Rated load (3) Ambient temp. 25±10℃ (4) Contact discharge voltage 8[kV] (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
5	Radiated, radio-frequency, electromagnetic field immunity test (EN61000-4-3)	(1) Rated input AC230V (2) Rated load (3) Ambient temp. 25±10℃ (4)Testing field strength (Level 3) ① 10[V/m] (80MHz to 1.0GHz) (5) Testing circuitry Fig.3	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure.	ok
6	Electrical fast transient/ burst immunity test (EN61000-4-4)	(1) Rated input AC230V (2) Rated load (3) Ambient temp. 25±10℃ (4) Test peak voltage 4[kV] (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
7	Surge immunity test (EN61000-4-5)	(1) Rated input AC230V (2) Rated load (3) Ambient temp. 25±10℃ (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
8	Immunity to conducted disturbances, induced by radio-frequency fields. (EN61000-4-6)	(1) Rated input AC230V (2) Rated load (3) Ambient temp. 25±10℃ (4) Voltage level (e.m.f.) 10[V] (Level 3) (5) Testing circuitry Fig.3	(1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure.	ok
9	Voltage dips, short interruptions and voltage variations immunity test (EN61000-4-11)	(1) Rated input AC230V ・30% reduction at 10ms min. ・60% reduction at 100ms min. ・95% reduction at 5s min. ・±10% variation at 15 minutes (2) Rated load (3) Ambient temp. 25±10℃ (4) 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

○ Testing circuitry

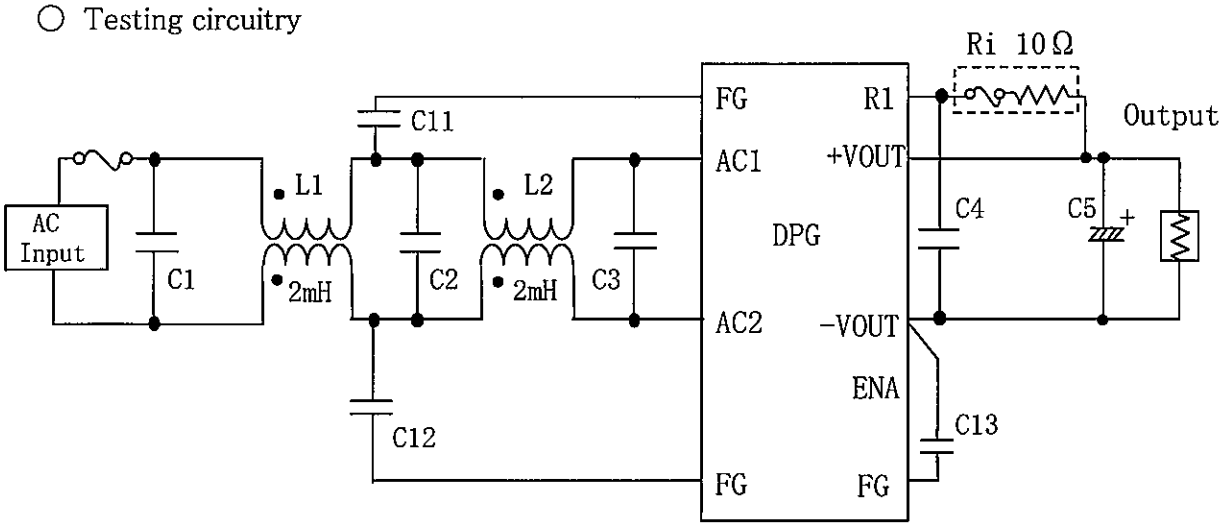

Fig. 1 Testing circuitry

C1, C2, C4	:	0.68uF 250V Film Capacitor ×2
C3	:	1.0uF 250V Film Capacitor ×2
C5	:	560uF 450V Electrolytic Capacitor
C11, C12, C13	:	2200pF Ceramic Capacitor
L1, L2	:	SC-15-200 (NEC TOKIN)

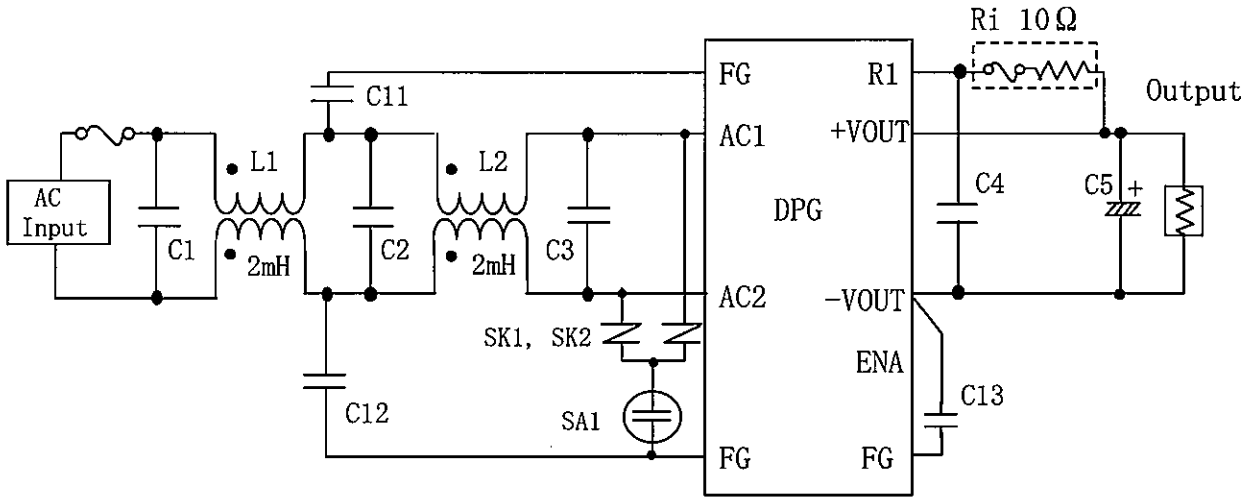

Fig. 2 Surge immunity Testing circuitry

C1, C2, C4	:	0.68uF 250V Film Capacitor ×2
C3	:	1.0uF 250V Film Capacitor ×2
C5	:	560uF 450V Electrolytic Capacitor
C11, C12, C13	:	2200pF Ceramic Capacitor
L1, L2	:	SC-15-200 (NEC TOKIN)
SK1, SK2	:	TND10V-471K (NIPPON CHEMI-CON CORP.)
SA1	:	DSA-302MA (MITSUBISHI MATERIALS COAP.)

○ Testing circuitry

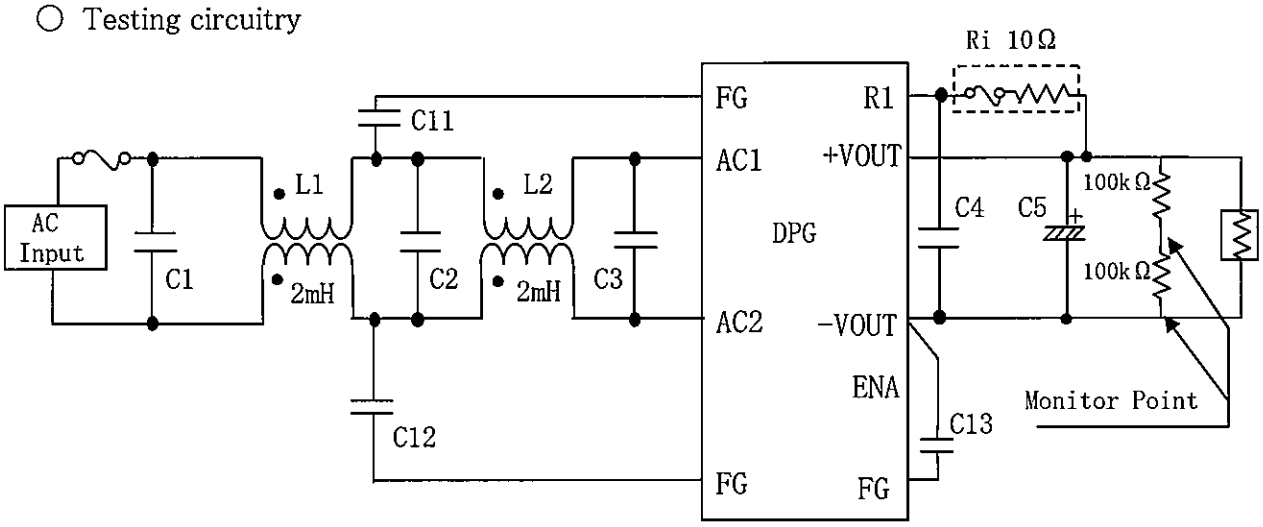

Fig. 3 Radiated, radio-frequency, electromagnetic field immunity and immunity to conducted disturbances, induced by radio-frequency fields testing circuitry

C1, C2, C4	: 0.68uF 250V Film Capacitor ×2
C3	: 1.0uF 250V Film Capacitor ×2
C5	: 560uF 450V Electrolytic Capacitor
C11, C12, C13	: 2200pF Ceramic Capacitor
L1, L2	: SC-15-200 (NEC TOKIN)