参考資料

COSEL

DHS250B Safety test results

November 20, 2009
OS DESIGN DEPT.

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No.	Test item	Test conditions	Conditions of acceptability	Result
1	High temp./overload test	(1) Input Max.voltage, Min.voltage (2) Overload (3) Baseplate temp. 75°C(B12/B48) Baseplate temp. 85°C(others) (4) Test period 48 hours (5) Testing circuitry Fig.1	(1) Power supply is not failed.	ok
2	Capacitance reduction test	(1) Rated input (DC280V) (2) Rated output (3) Ambient temp. 25±10°C	(1) No smoke, no fire. (2) No rise of the output voltage.	ok
3	Low voltage input test	(1) Input Min. regulation voltage (2) Rated output (3) Baseplate temp. 75°C(B12/B48) Baseplate temp. 85°C(others) (4) Test period 48 hours (5) Testing circuitry Fig.1	(1) Power supply is not failed.	ok
4	Input ON/OFF test	(1) Input : Max.voltage T= 2sec Duty= 50% (2) Output : Rated output (3) Ambient temp. : 25±10°C (4) On/off period : 1,000 (5) Test circuit : Fig.1	(1)Power supply is not failed. (2)The surge current of each components should not exceed the rated value.	ok
5	Output ON/OFF test	(1) Rated input (DC280V) (2) Output 0%←→100% T= 2sec Duty= 50% (3) Ambient temp. 25±10°C (4) On/off period 1,000 (5) Testing circuitry Fig.1	(1) Power supply is not failed.	ok
6	Output-short start test	(1) Rated input (DC280V) (2) Output Short start (3) Ambient temp. 25±10°C (4) Testing circuitry Fig.1	(1) Power supply is not failed.	ok
7	Output short test	(1) Rated input (DC280V) (2) Output Short (3) Ambient temp. 25±10°C (4) Test period 48 hours (5) Testing circuitry Fig.1	(1) Power supply is not failed.	ok
8	Withstand voltage test (High-pot test)	(1) Input Not applied. (2) Ambient temp. 25±10°C (3) The applied voltage is 1.4 times of specifications.	(1) Insulation breakdown ,flashover or electric arc is not occurred.	ok
9	Isolation resistance test	(1) Input Not applied. (2) Ambient temp. 25±10°C	(1) When a regulation voltage is applied, isolation resistance is 1.4 times of specifications.	ok
10	Vibration/impact test	Vibration (1)f=10～55Hz : 49.0m/s² (2)3 minutes period (3)60 minutes along X, Y and Z axis Impact (1)196.1m/s² 11ms (2)Once each X, Y and Z axis	(1) No degradiation of electric characteristics after test. (2) No crack at solder joint. (3) No marked damage of appearance.	ok
11	Line Noise Tolerance test	(1) Input AC230V (2) Rated Output (3) Ambient temp. 25±10°C (4) Test Voltage ±2 kV (5) Pulse width 50～1000ns (6) Mode Normal and Common (7) 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

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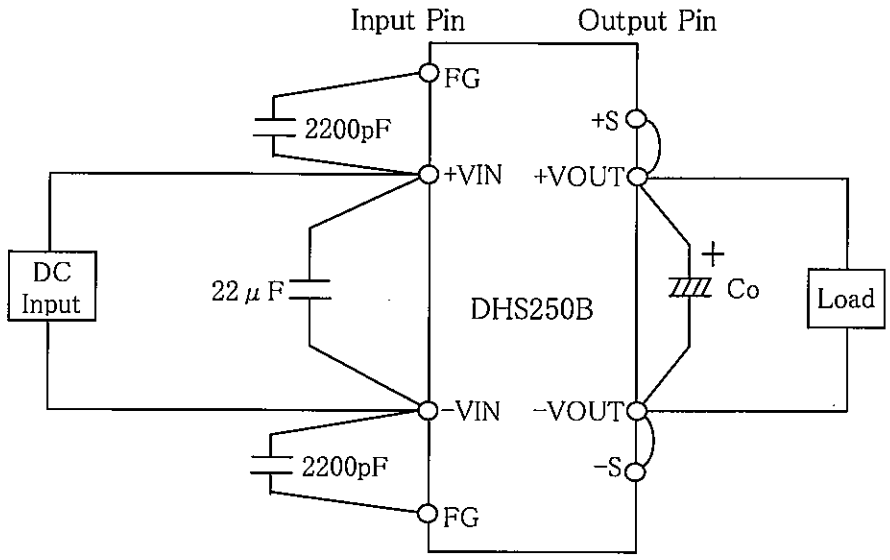
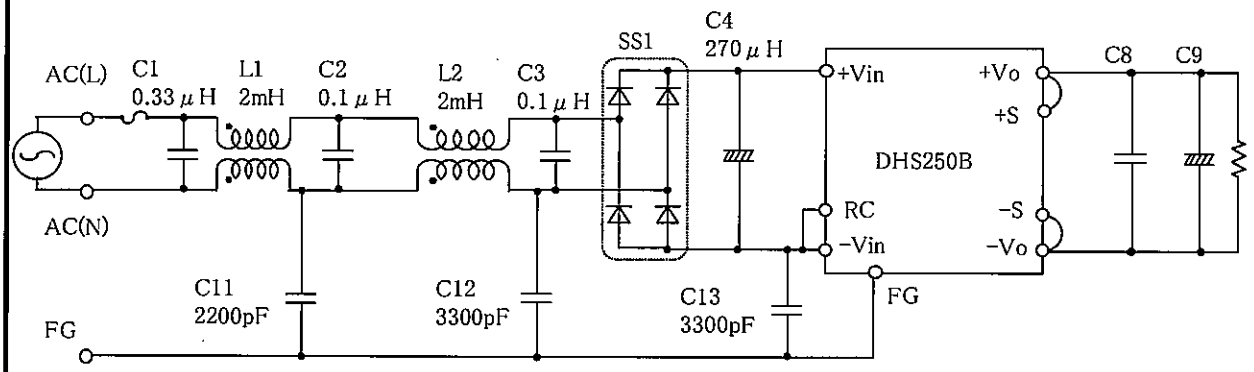


FG:Mounting Hole

Co : DHS250B03 2200 μ F
DHS250B05 2200 μ F
DHS250B07 2200 μ F
DHS250B12 1000 μ F
DHS250B15 1000 μ F
DHS250B24 470 μ F
DHS250B28 470 μ F
DHS250B48 330 μ F

Fig.1 Testing circuitry



L1,L2 : SC-05-200(NEC TOKIN)
SS1 : D10XB60(SINDENGEN)

C8 : DHS250B03 10 μ F
DHS250B05 10 μ F
DHS250B07 10 μ F
DHS250B12 10 μ F
DHS250B15 10 μ F
DHS250B24 4.7 μ F
DHS250B28 4.7 μ F
DHS250B48 2.2 μ F

C9 : DHS250B03 2200 μ F
DHS250B05 2200 μ F
DHS250B07 2200 μ F
DHS250B12 1000 μ F
DHS250B15 1000 μ F
DHS250B24 470 μ F
DHS250B28 470 μ F
DHS250B48 330 μ F

Fig.2 Line Noise Tolerance Testing circuitry