

Approved : Yoshimichi Hirokawa  
Yoshimichi Hirokawa

Prepared : Hiroyuki Syoji  
Hiroyuki Syoji

No.	Test item	Conditions	Conditions of acceptability	Result
1	High temp./overload test	(1) Input : Max.voltage, Min.voltage (2) Output : Overload (3) Test period : 48 hours (4) Testing circuit Fig.1	(1)Power supply is not failed.	OK
2	High voltage input test	(1) Input : 2 times of rated voltage (2) Output : Rated output (3) Ambient temp. : $25 \pm 10^{\circ}\text{C}$ (4) Testing circuit Fig.1	(1)No smoke, no fire.	OK
3	Low voltage input test	(1) Input : Min. regulation voltage (2) Output : Rated output (3) Test period : 48 hours (4) Testing circuit 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. : $25 \pm 10^{\circ}\text{C}$ (4) ON/OFF period : 1,000 (5) Testing 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) Input : Rated input (2) Output : 0% $\longleftrightarrow$ 100% T= 2sec Duty= 50% (3) Ambient temp. : $25 \pm 10^{\circ}\text{C}$ (4) ON/OFF period : 1,000 (5) Testing circuit Fig.1	(1)Power supply is not failed.	OK
6	Output-short start test	(1) Input : Rated input (2) Output : Short start (3) Ambient temp. : $25 \pm 10^{\circ}\text{C}$ (4) Testing circuit Fig.1	(1)Power supply is not failed.	OK
7	Output short test	(1) Input : Rated input (2) Output : Short (3) Ambient temp. : $25 \pm 10^{\circ}\text{C}$ (4) Test period : 48 hours (5) Testing circuit Fig.1	(1)Power supply is not failed.	OK
8	Withstand voltage test (High-pot test)	(1) Input : N/A (2) Ambient temp. : $25 \pm 10^{\circ}\text{C}$ (3)Test voltage : 1.4 times of specifications.	(1)Insulation breakdown , flashover or electric arc is not occurred	OK
9	Isolation resistance test	(1) Input : N/A (2) Ambient temp. : $25 \pm 10^{\circ}\text{C}$	(1)When a regulation voltage is applied, isolation resistance is 1.4 times of specifications.	OK
10	Vibration/impact test	Vibration (1)f=10~150Hz : $49.0\text{m/s}^2$ (2)3 minutes period (3)60 minutes along X, Y and Z axis  Impact (1) $196.1\text{m/s}^2$ 11ms (2)Once each X, Y and Z axis	(1)No degradation of electric characteristics after test. (2)No crack at solder joint. (3)No marked damage of appearance.	OK

○ Testing circuitry

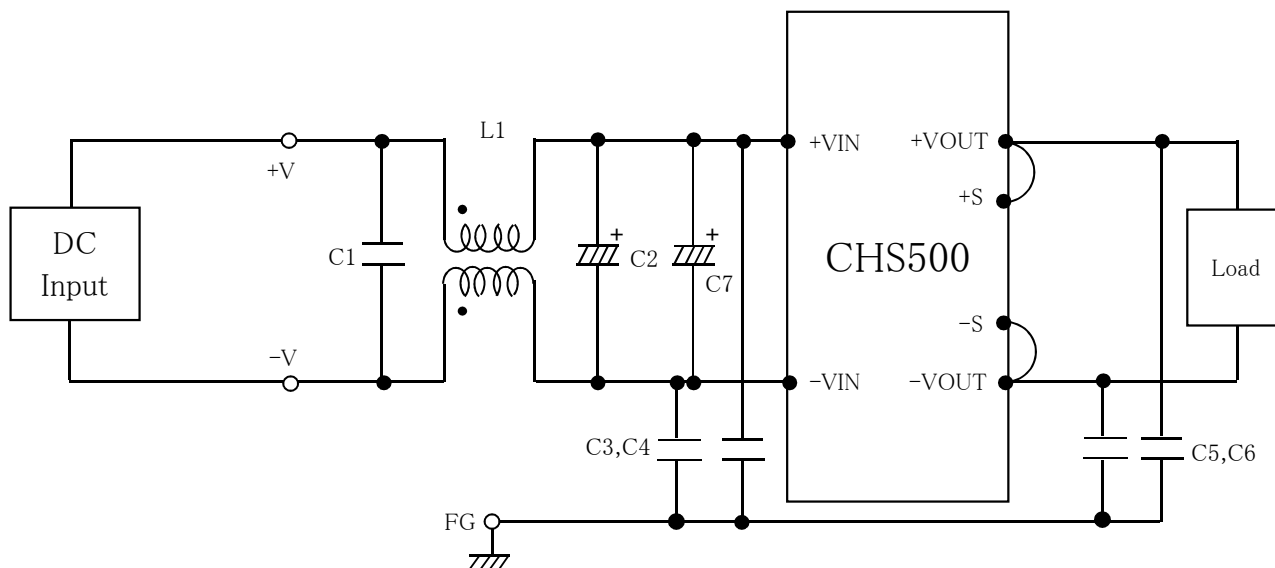


Fig.1 Testing circuitry

- L1 : 1mH SC-20-10J (TOKIN)
- C1 : 250V 2.2  $\mu$ F FPD22E225J4 (NITSUKO)
- C2,7 : 100V 100  $\mu$ F PWseries (nichicon)
- C3,4 : 630V 0.068  $\mu$ F FPD22J683J4 (NITSUKO)
- C5,6 : 630V 0.033  $\mu$ F FPD22J333J4 (NITSUKO)
- D1 : ERD32-02 (FUJI ELECTRIC)
- SA1~3 : ERZV10D101 (100V)

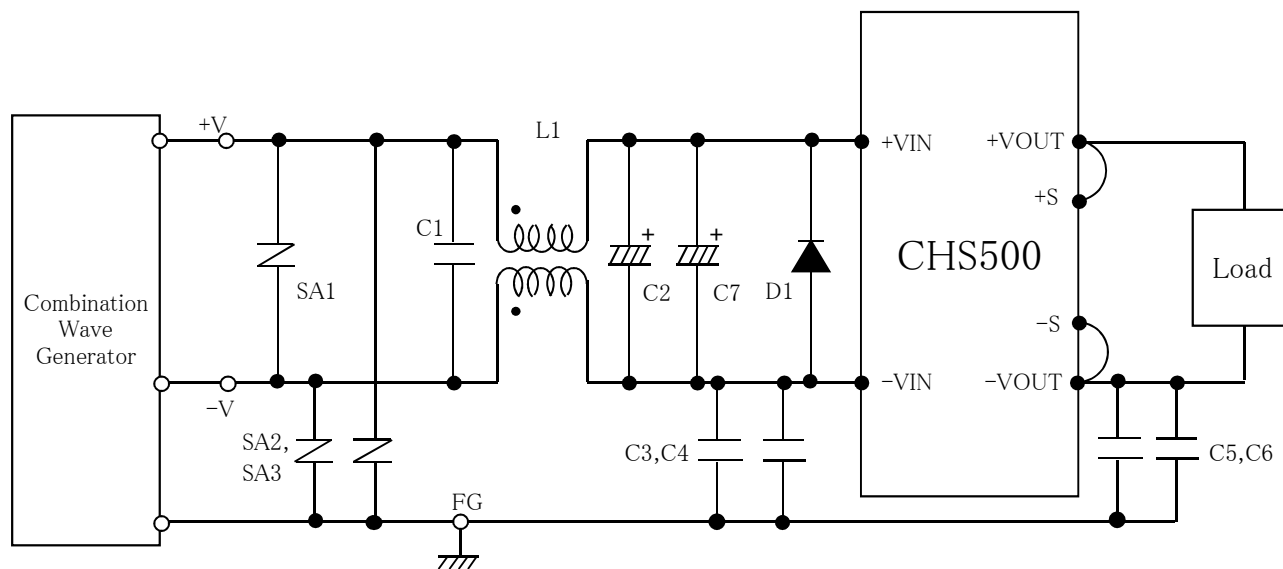


Fig.2 Surge immunity Testing circuitry

- L1 : 1mH SC-20-10J (TOKIN)
- C1 : 250V 2.2  $\mu$ F FPD22E225J4 (NITSUKO)
- C2,7 : 100V 100  $\mu$ F PWseries (nichicon)
- C3,4 : 630V 0.068  $\mu$ F FPD22J683J4 (NITSUKO)
- C5,6 : 630V 0.033  $\mu$ F FPD22J333J4 (NITSUKO)
- D1 : ERD32-02 (FUJI ELECTRIC)
- SA1~3 : ERZV10D101 (100V)