

CHS380 series Safety test results

Approved : Junichi Hatagishi
Junichi Hatagishi

Prepared : Masahiro Kondo
Masahiro Kondo

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) $f=10 \sim 150\text{Hz}$: 49.0m/s^2 (2)3 minutes period (3)60 minutes along X, Y and Z axis Impact (1) 196.1m/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

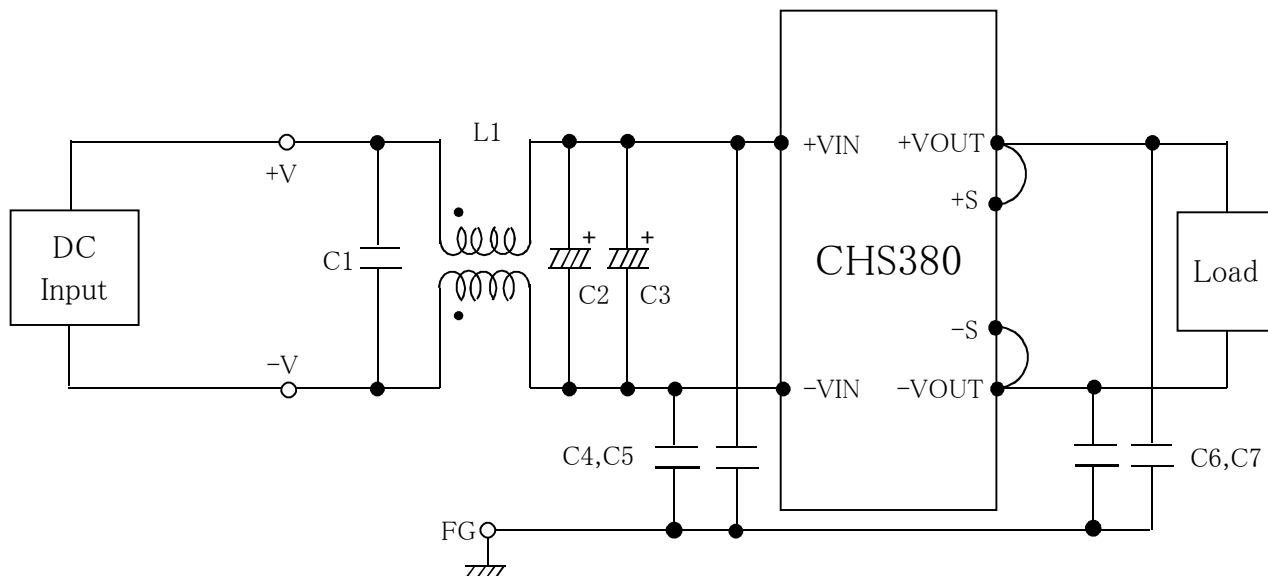


Fig.1 Testing circuitry

- | | | |
|-------|----------------------|-----------------------|
| L1 | : 1mH | SC-20-10J (TOKIN) |
| C1 | : 250V 2.2 μ F | FPD22E225J4 (NITSUKO) |
| C2,C3 | : 100V 100 μ F | PWseries (nichicon) |
| C4,C5 | : 630V 0.068 μ F | FPD22J683J4 (NITSUKO) |
| C6,C7 | : 630V 0.033 μ F | FPD22J333J4 (NITSUKO) |

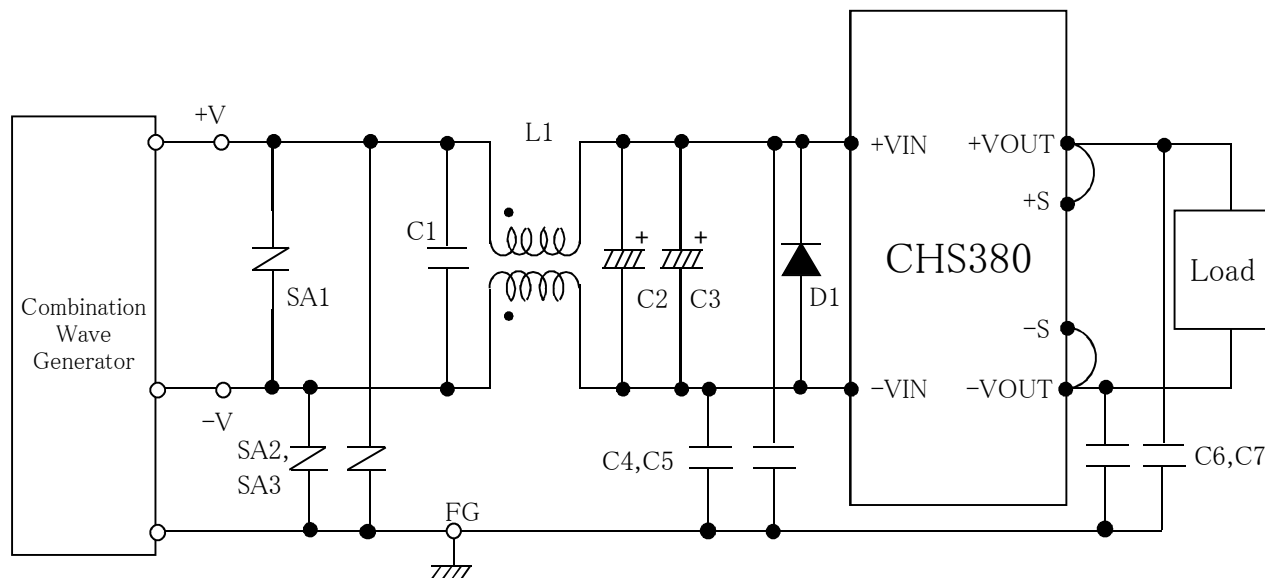


Fig.2 Surge immunity Testing circuitry

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|-------|----------------------|-----------------------|
| L1 | : 1mH | SC-20-10J (TOKIN) |
| C1 | : 250V 2.2 μ F | FPD22E225J4 (NITSUKO) |
| C2,C3 | : 100V 100 μ F | PWseries (nichicon) |
| C4,C5 | : 630V 0.068 μ F | FPD22J683J4 (NITSUKO) |
| C6,C7 | : 630V 0.033 μ F | FPD22J333J4 (NITSUKO) |
| D1 | : ERD32-02 | (FUJI ELECTRIC) |
| SA1~3 | : ERZV10D101 100V | (Panasonic) |