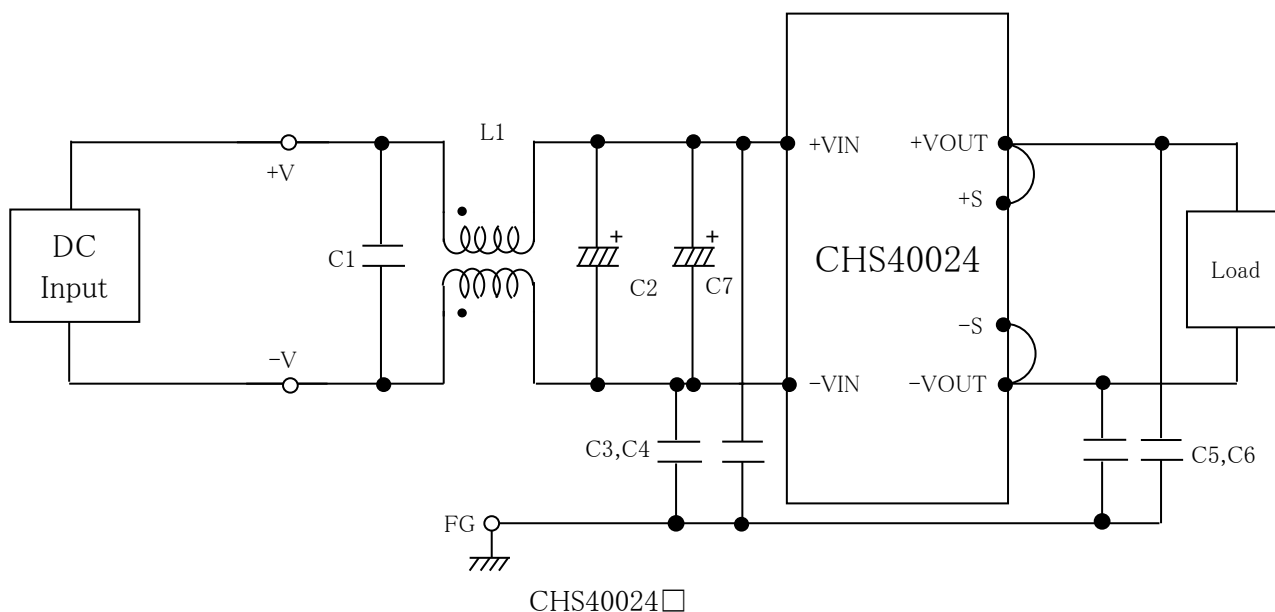


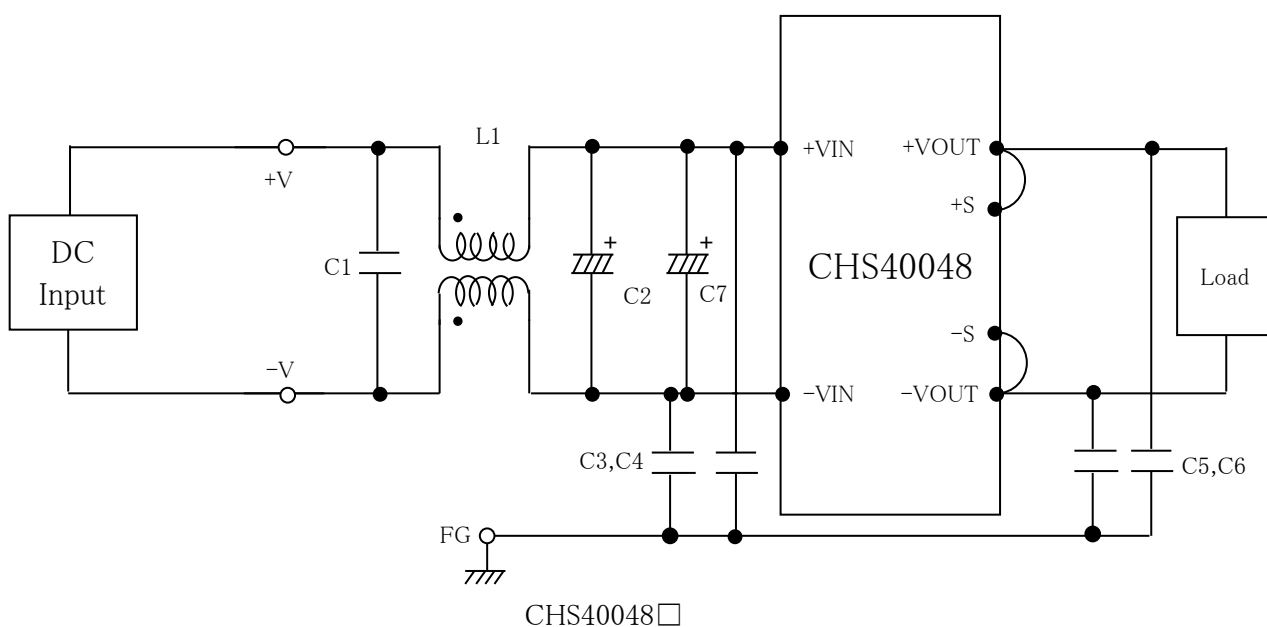
Approved : Takayuki Fukuda  
Takayuki FukudaPrepared : Eisu Ushitani  
Eisu Ushitani

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



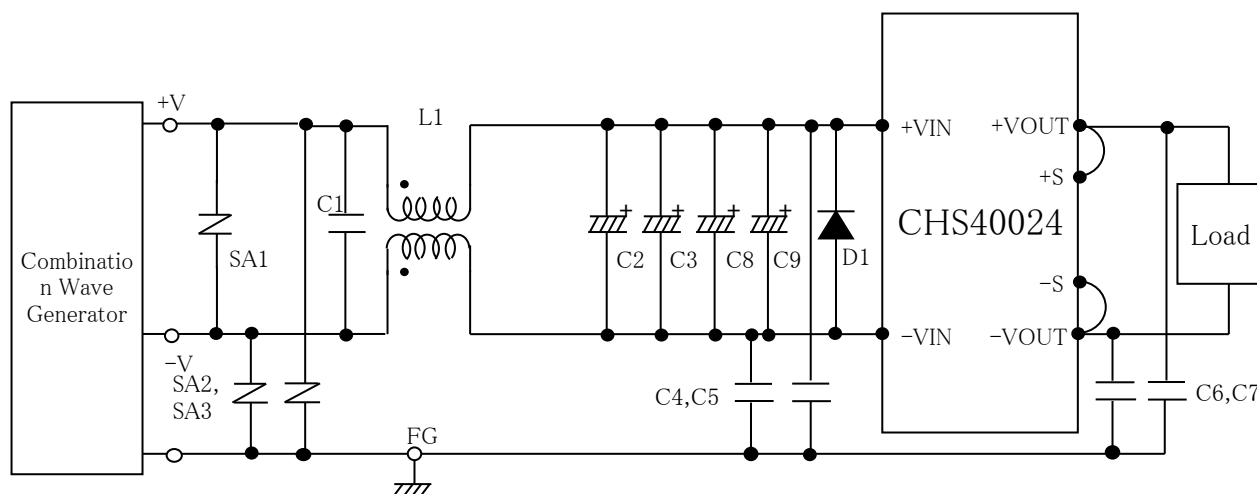
- L1 : 1mH SC-30-10J (TOKIN)
- C1 : 250V 2.2  $\mu$ F FPD22E225J4 (NITSUKO)
- C2,7 : 50V 330  $\mu$ F PWseries (nichicon)
- C3,4 : 630V 0.068  $\mu$ F FPD22J683J4 (NITSUKO)
- C5,6 : 630V 0.033  $\mu$ F FPD22J333J4 (NITSUKO)



- 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)

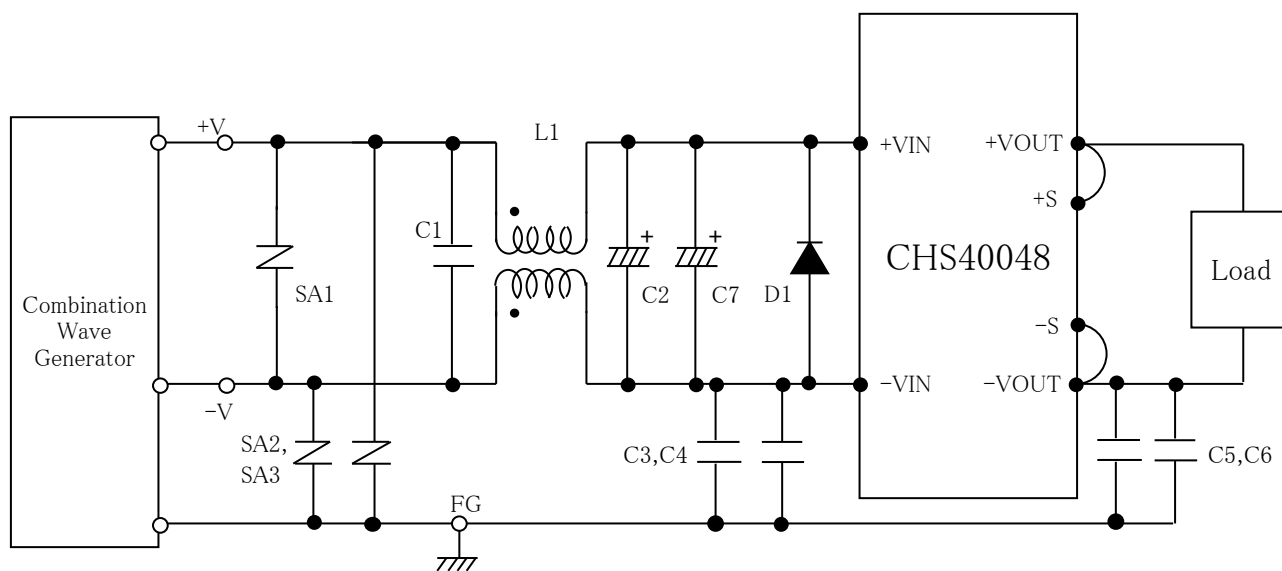
Fig.1 Testing circuitry

○ Testing circuitry



CHS40024□

- |             |   |                          |                       |
|-------------|---|--------------------------|-----------------------|
| L1          | : | 1mH                      | SC-30-10J (TOKIN)     |
| C1          | : | 250V 2.2 $\mu$ F         | FPD22E225J4 (NITSUKO) |
| C2,C3,C8,C9 | : | 50V 330 $\mu$ F PWseries | (nichicon)            |
| C4,C5       | : | 630V 0.068 $\mu$ F       | FPD22J683J4 (NITSUKO) |
| C6,C7       | : | 630V 0.033 $\mu$ F       | FPD22J333J4 (NITSUKO) |
| D1          | : | ERD32-02                 | (FUJI ELECTRIC)       |
| SA1~3       | : | ERZV10D470               | (Panasonic)           |



CHS40048□

- |       |   |                           |                       |
|-------|---|---------------------------|-----------------------|
| 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                | (Panasonic)           |

Fig.2 Surge immunity Testing circuitry