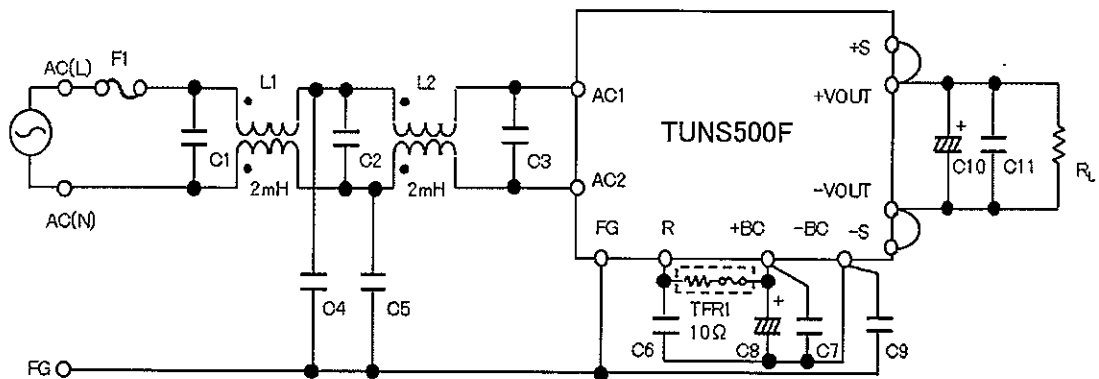


Approved : *Takayuki Fukuda*  
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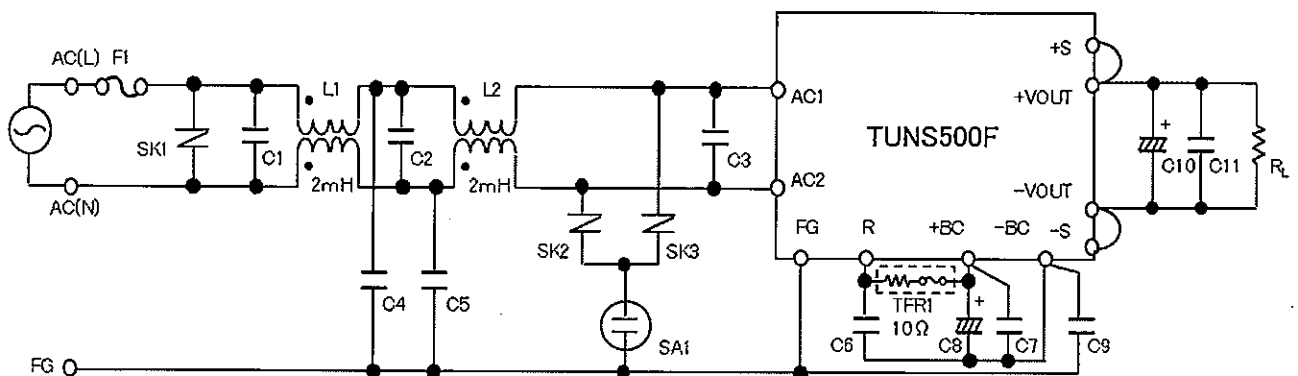
No.	Test item	Conditions	Conditions of Acceptability	Result
1	Line conduction	(1) Input AC230V (2) Outout Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (4) Testing circuitry Fig.1	(1)Meets the undermentioned standard. FCC Part15 classA , VCCI classA CISPR22 classA , EN55022-A	OK
2	Radiated emission	(1) Input AC230V (2) Outout Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (4) Testing circuitry Fig.1	(1)Meets the undermentioned standard. FCC Part15 classA , VCCI classA CISPR22 classA , EN55022-A	OK
3	Harmonic current (EN61000-3-2)	(1) Input AC230V (2) Outout Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (4) Testing circuitry Fig.1	(1)Meets the undermentioned standard. EN61000-3-2 classA	OK
4	Static electricity immunity test (EN61000-4-2)	(1) Input AC230V (2) Outout Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (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) Input AC230V (2) Outout Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (4) Testing field strength (Level 3) ① 10[V/m] (80MHz to 1.0GHz) (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
6	Electrical fast transient/ burst immunity test (EN61000-4-4)	(1) Input AC230V (2) Outout Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (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) Input AC230V (2) Outout Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (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) Input AC230V (2) Outout Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (4) Voltage level (e.m.f.) 10[V] (Level 3) (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
9	Power frequency magnetic field Immunity test (EN61000-4-8)	(1) Input AC230V (2) Outout Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (4) Magnetic field strength 30[A/m] (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
10	Voltage dips, short interruptions and voltage variations immunity test (EN61000-4-11)	(1) Input AC230V • 30% reduction at 10ms min. • 60% reduction at 100ms min. • 95% reduction at 5s min. • $\pm 10\%$ variation at 15 minutes (2) Outout Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (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



- |                                                          |                                               |
|----------------------------------------------------------|-----------------------------------------------|
| L1,L2 : SC-15-200(NEC TOKIN)                             | C11 : TUNS500F12 10 $\mu$ F Ceramic Capacitor |
| C1,C2 : 0.68 $\mu$ F 310V Film Capacitor $\times$ 2      | TUNS500F28 4.7 $\mu$ F Ceramic Capacitor      |
| C3 : 1.0 $\mu$ F 310V Film Capacitor $\times$ 2          | TUNS500F48 2.2 $\mu$ F Ceramic Capacitor      |
| C4,C5,C9 : 2200pF Ceramic Capacitor                      |                                               |
| C6,C7 : 0.68 $\mu$ F 450V Film Capacitor $\times$ 2      |                                               |
| C8 : 390 $\mu$ F 450V Electrolytic Capacitor $\times$ 2  |                                               |
| C10 : TUNS500F12 2200 $\mu$ F 25V Electrolytic Capacitor |                                               |
| TUNS500F28 1000 $\mu$ F 50V Electrolytic Capacitor       |                                               |
| TUNS500F48 470 $\mu$ F 63V Electrolytic Capacitor        |                                               |

Fig.1 Testing circuitry



- |                                                          |                                               |
|----------------------------------------------------------|-----------------------------------------------|
| L1,L2 : SC-15-200(NEC TOKIN)                             | C11 : TUNS500F12 10 $\mu$ F Ceramic Capacitor |
| C1,C2 : 0.68 $\mu$ F 310V Film Capacitor $\times$ 2      | TUNS500F28 4.7 $\mu$ F Ceramic Capacitor      |
| C3 : 1.0 $\mu$ F 310V Film Capacitor $\times$ 2          | TUNS500F48 2.2 $\mu$ F Ceramic Capacitor      |
| C4,C5,C9 : 2200pF Ceramic Capacitor                      | SK1,SK2,SK3 : TND14V-621K(Nippon Chemi-con)   |
| C6,C7 : 0.68 $\mu$ F 450V Film Capacitor $\times$ 2      | SA1 : DSA-402MA(MITSUBISHI MATERIALS)         |
| C8 : 390 $\mu$ F 450V Electrolytic Capacitor $\times$ 2  |                                               |
| C10 : TUNS500F12 2200 $\mu$ F 25V Electrolytic Capacitor |                                               |
| TUNS500F28 1000 $\mu$ F 50V Electrolytic Capacitor       |                                               |
| TUNS500F48 470 $\mu$ F 63V Electrolytic Capacitor        |                                               |

Fig.2 Surge immunity Testing circuitry