

SU1R5/SUC1R5 series EMI/EMS Test resultsApproved : T. SugimoriPrepared : T. Ohara

No.	Test item	Conditions	Conditions of Acceptability	Result
1	Line conduction	(1) Rated input (2) Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (4) Testing circuitry Fig.1	(1)Meets the undermentioned FCC Part15 classA , VCCI classA CISPR22 classA , EN55022-A	OK
2	Radiated emission	(1) Rated input (2) Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (4) Testing circuitry Fig.1	(1)Meets the undermentioned FCC Part15 classA , VCCI classA CISPR22 classA , EN55022-A	OK
3	Static electricity immunity test (EN61000-4-2)	(1) Rated input (2) Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (4) Contact discharge voltage 8[kV] (EN61000-4-2 Level 4) (5) 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
4	Radiated, radio-frequency, electromagnetic field immunity test (EN61000-4-3)	(1) Rated input (2) Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (4)Testing field strength 10[V/m] (EN61000-4-3 Level 3) (5) 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
5	Electrical fast transient/ burst immunity test (EN61000-4-4)	(1) Rated input (2) Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (4) Test peak voltage 4[kV] (IEC61000-4-4 Level 4) (5) 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
6	Surge immunity test (EN61000-4-5)	(1) Rated input (2) Rated load (3) Ambient temp. $25\pm 10^{\circ}\text{C}$ (4) Test voltage Line to line 2[kV] (Level 4) (5) Testing circuitry Fig.3	(1)The power supply is not stc (2)Circuit does not malfunction. (3)No abnormality of the insulation destruction etc. (4)Parts are no damaged.	OK

## ○ Testing circuitry

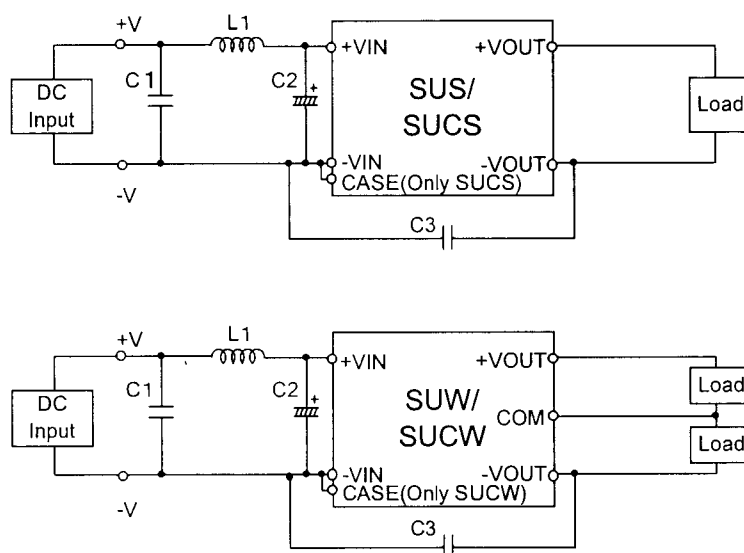


Fig.1 Testing circuitry

## SU□/SUC□1R505

L1 :	2.2μH	GLF2518T2R2M	(TDK)
C1 :	16V 1μF	C2012JB1C105K	(TDK)
C2 :	16V 100μF	UPW1C101M	(NICHICON)
C3 :	-		

## SU□/SUC□1R512

L1 :	4.7μH	GLF2518T4R7M	(TDK)
C1 :	25V 1μF	C2012JB1E105K	(TDK)
C2 :	25V 47μF	UPW1E470M	(NICHICON)
C3 :	1000V 100pF	GRM31AR33A101K	(MURATA)

## SU□/SUC□1R524

L1 :	10μH	GLF2518T100K	(TDK)
C1 :	50V 0.47μF	C2012JB1H474K	(TDK)
C2 :	50V 33μF	UPW1H330M	(NICHICON)
C3 :	1000V 100pF	GRM31AR33A101K	(MURATA)

## SU□/SUC□1R548

L1 :	10μH	GLF2518T100K	(TDK)
C1 :	100V 0.47μF	C3216JB2A474K	(TDK)
C2 :	100V 10μF	UPW2A100M	(NICHICON)
C3 :	1000V 470pF	GRM31BR33A471K	(MURATA)

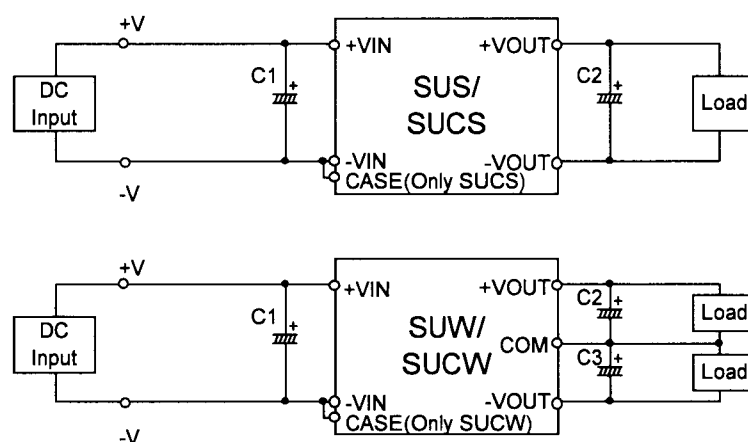


Fig.2 Testing circuitry

C1 : SU□/SUC□1R505 16V 100 $\mu$ F UPW1C101M (NICHICON)  
 SU□/SUC□1R512 25V 47 $\mu$ F UPW1E470M (NICHICON)  
 SU□/SUC□1R524 50V 33 $\mu$ F UPW1H330M (NICHICON)  
 SU□/SUC□1R548 100V 10 $\mu$ F UPW2A100M (NICHICON)  
 C2,C3 : 25V 100 $\mu$ F UPW1E101M (NICHICON)

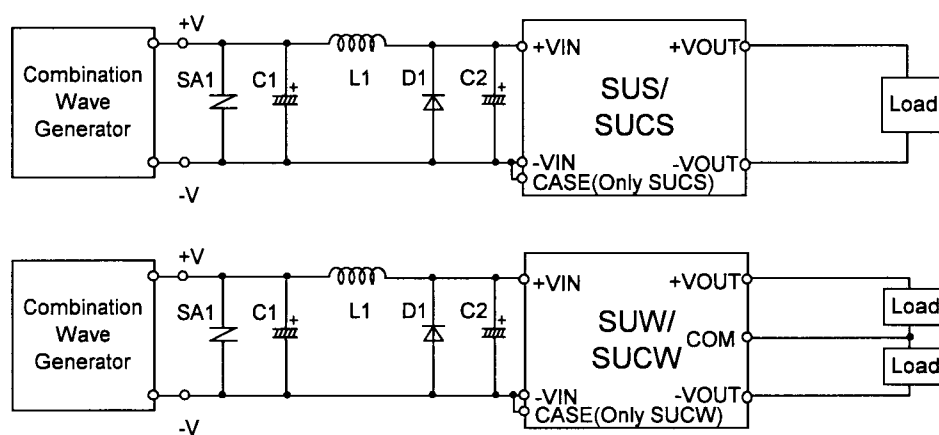


Fig.3 Surge immunity testing circuitry

SA1 : SU□/SUC□1R505 22V ERZV10D220 (MATSUSHITA ELECTRONIC)  
 SU□/SUC□1R512 27V ERZV10D270 (MATSUSHITA ELECTRONIC)  
 SU□/SUC□1R524 47V ERZV10D470 (MATSUSHITA ELECTRONIC)  
 SU□/SUC□1R548 100V ERZV10D101 (MATSUSHITA ELECTRONIC)  
 L1 : 10 $\mu$ H CI4-100L (KORIN ELECTRONICS)  
 D1 : 200V 3A ERD32-02 (FUJI ELECTRIC)  
 C1,C2 : SU□/SUC□1R505 16V 100 $\mu$ F UPW1C101M (NICHICON)  
 SU□/SUC□1R512 25V 47 $\mu$ F UPW1E470M (NICHICON)  
 SU□/SUC□1R524 50V 33 $\mu$ F UPW1H330M (NICHICON)  
 SU□/SUC□1R548 100V 10 $\mu$ F UPW2A100M (NICHICON)