



April 15, 2009
OS DESIGN DEPT.2

SUT3 Series EMI/EMS Test results

Approved : *Kazumari Asano*

Prepared : *Sho Saito*

No.	Test item	Conditions	Conditions of Acceptability	Result
1	Line conduction	(1) Rated input (2) Rated load (3) Ambient temp. 25±10°C (4) Testing circuitry Fig.1	(1)Meets the undermentioned standard. FCC Part15 classA , VCCI classA CISPR22 classA , EN55022-A	O.k.
2	Radiated emission	(1) Rated input (2) Rated load (3) Ambient temp. 25±10°C (4) Testing circuitry Fig.1	(1)Meets the undermentioned standard. FCC Part15 classA , VCCI classA CISPR22 classA , EN55022-A	O.k.
3	Static electricity immunity test (EN61000-4-2)	(1) Rated input (2) Rated load (3) Ambient temp. 25±10°C (4) Contact discharge voltage 4[kV] (EN61000-4-2 Level 2) (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.	O.k.
4	Radiated, radio-frequency, electromagnetic field immunity test (EN61000-4-3)	(1) Rated input (2) Rated load (3) Ambient temp. 25±10°C (4)Testing field strength 10[V/m] (EN61000-4-3 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.	O.K.
5	Electrical fast transient/ burst immunity test (EN61000-4-4)	(1) Rated input (2) Rated load (3) Ambient temp. 25±10°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.	O.K.
6	Surge immunity test (EN61000-4-5)	(1) Rated input (2) Rated load (3) Ambient temp. 25±10°C (4) Test voltage Line to line 2[kV] (Level 3) (5) Testing circuitry Fig.3	(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.	O.k.

○ Testing circuitry

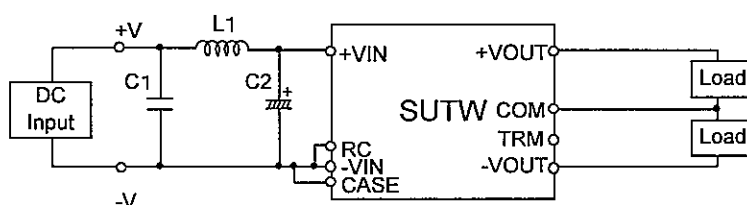
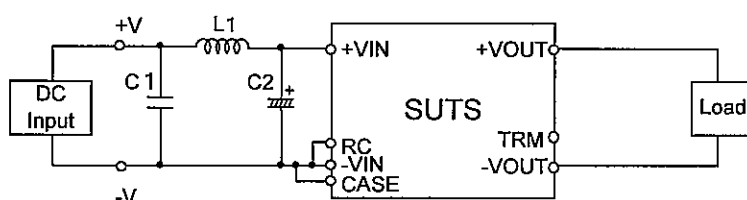


Fig.1 Testing circuitry

SUT□305

L1 :	2.2 μ H	CY3H-2R2	(KORIN ELECTRONICS)
C1 :	16V 1 μ F	C2012JB1C105K	(TDK)
C2 :	16V 220 μ F	UPW1C221M	(NICHICON)

SUT□312

L1 :	4.7 μ H	CY3H-4R7	(KORIN ELECTRONICS)
C1 :	25V 1 μ F	C2012JB1E105K	(TDK)
C2 :	25V 100 μ F	UPW1E101M	(NICHICON)

SUT□324

L1 :	10 μ H	CY3H-100	(KORIN ELECTRONICS)
C1 :	50V 0.47 μ F	C2012JB1H474K	(TDK)
C2 :	50V 47 μ F	UPW1H470M	(NICHICON)

SUT□348

L1 :	10 μ H	CY3H-100	(KORIN ELECTRONICS)
C1 :	100V 0.47 μ F	C3216JB2A474K	(TDK)
C2 :	100V 22 μ F	UPW2A220M	(NICHICON)

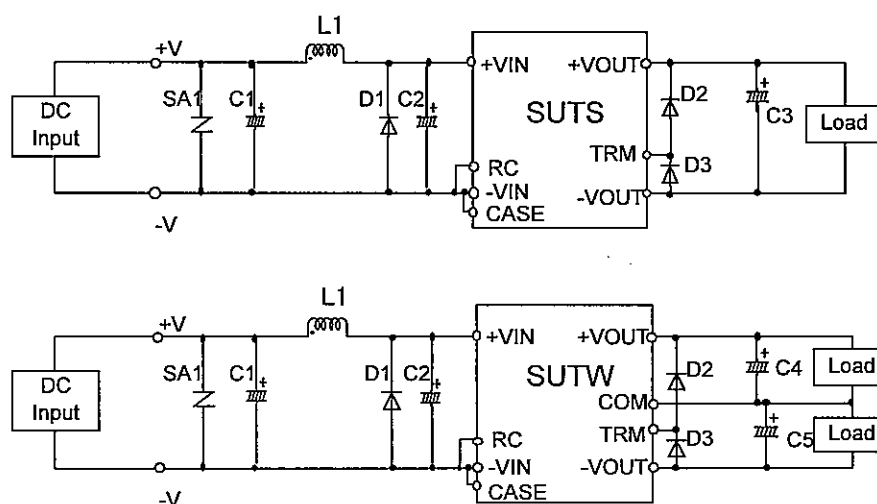


Fig.2 Testing circuitry

SUT□305

C1	: 25V	1000 μ F	UPW1E102M	(NICHICON)
C2	: 16V	220 μ F	UPW1C221M	(NICHICON)
SA1	: 18V	ERZV10D180	(MATSUSHITA ELECTRONIC)	
L1	: 2.2 μ H	CY3H-2R2	(KORIN ELECTRONICS)	

SUT□312

C1	: 25V	470 μ F	UPW1E471M	(NICHICON)
C2	: 25V	100 μ F	UPW1E101M	(NICHICON)
SA1	: 27V	ERZV10D270	(MATSUSHITA ELECTRONIC)	
L1	: 4.7 μ H	CY3H-4R7	(KORIN ELECTRONICS)	

SUT□324

C1	: 50V	100 μ F	UPW1H101M	(NICHICON)
C2	: 50V	47 μ F	UPW1H470M	(NICHICON)
SA1	: 47V	ERZV10D470	(MATSUSHITA ELECTRONIC)	
L1	: 10 μ H	CY3H-100	(KORIN ELECTRONICS)	

SUT□348

C1	: 100V	33 μ F	UPW2A330M	(NICHICON)
C2	: 100V	22 μ F	UPW2A220M	(NICHICON)
SA1	: 100V	ERZV10D101	(MATSUSHITA ELECTRONIC)	
L1	: 10 μ H	CY3H-100	(KORIN ELECTRONICS)	

D1	:	3A	200V	ERD32-02	(FUJI ELECTRIC)
D2,D3	:	1A	100V	S5566B	(TOSHIBA)
C3	:	SUTS305	25V	220 μ F	UPW1E221M (NICHICON)
C4,C5	:	SUTW305	25V	100 μ F	UPW1E101M (NICHICON)

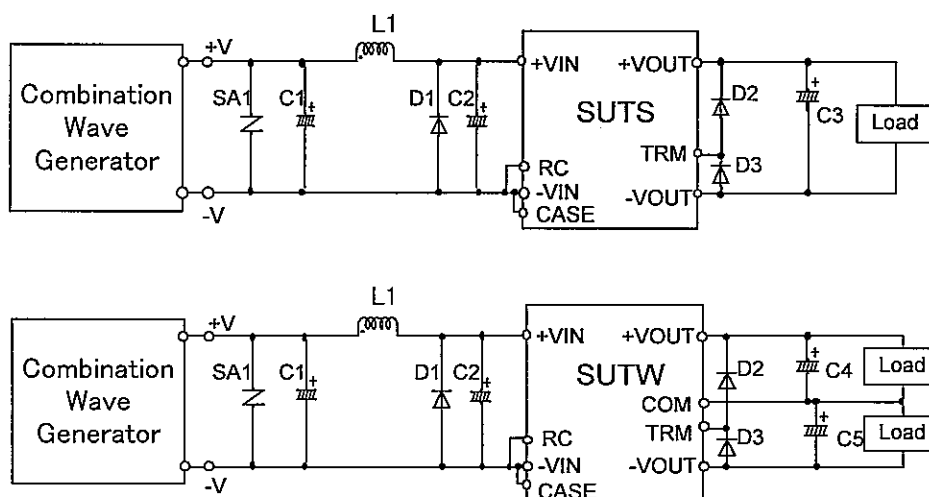


Fig.3 Surge immunity testing circuitry

SUT□305

C1	:	25V	1000 μ F	UPW1E102M	(NICHICON)
C2	:	16V	220 μ F	UPW1C221M	(NICHICON)
SA1	:	18V	ERZV10D180	(MATSUSHITA ELECTRONIC)	
L1	:	2.2 μ H	CY3H-2R2	(KORIN ELECTRONICS)	

SUT□312

C1	:	25V	470 μ F	UPW1E471M	(NICHICON)
C2	:	25V	100 μ F	UPW1E101M	(NICHICON)
SA1	:	27V	ERZV10D270	(MATSUSHITA ELECTRONIC)	
L1	:	4.7 μ H	CY3H-4R7	(KORIN ELECTRONICS)	

SUT□324

C1	:	50V	100 μ F	UPW1H101M	(NICHICON)
C2	:	50V	47 μ F	UPW1H470M	(NICHICON)
SA1	:	47V	ERZV10D470	(MATSUSHITA ELECTRONIC)	
L1	:	10 μ H	CY3H-100	(KORIN ELECTRONICS)	

SUT□348

C1	:	100V	33 μ F	UPW2A330M	(NICHICON)
C2	:	100V	22 μ F	UPW2A220M	(NICHICON)
SA1	:	100V	ERZV10D101	(MATSUSHITA ELECTRONIC)	
L1	:	10 μ H	CY3H-100	(KORIN ELECTRONICS)	

D1	:	3A	200V	ERD32-02	(FUJI ELECTRIC)
D2,D3	:	1A	100V	S5566B	(TOSHIBA)
C3	:	SUTS305	25V	220 μ F	UPW1E221M (NICHICON)
C4,C5	:	SUTW305	25V	100 μ F	UPW1E101M (NICHICON)