JCT812TA 12A SCR

Rev.A.1.1

JCT812TA silicon controlled rectifier is specifically designed for medium power switching and phase control applications. High current density due to mesa technology; SIPOS and Glass Passivation technology used has reliable operation up to 125 junction temperature. Low I_{GT} parts available. From all three terminals to external heatsink, JCT812TA provides a rated insulation voltage of 2500 V_{RMS}, complying with UL standards (File ref: E252906). Package TO-220A is RoHS compliant.

Parameter	Symbol	Value	Unit
Storage junction temperature range	T_{stg}	-40-150 06)	s

Peak gate current (t_p=20 s , T_j=125)	I_{GM}	4	A
Average gate power dissipation (T_j=125)	$P_{G(AV)}$	1	W
Peak gate power	P_{GM}	10	W
Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.7)	V_{pp}	0.5	kV

(T_j=25 unless otherwise specified)

Symbol	**Test Condition**	**Value**			**Unit**
		MIN.	**TYP.**	**MAX.**	
I_{GT}	V_D			V	

J CT 8 12 T A

J: JieJie Microelectronics Co., Ltd.

CT: SCRs

8: V_{DRM} /V_{RRM} ≥800V

12: $I_{T(RMS)}$:12A

T: T:I_{GT} 5mA

A: A:TO-220A(Ins)

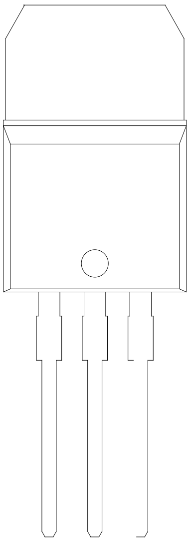
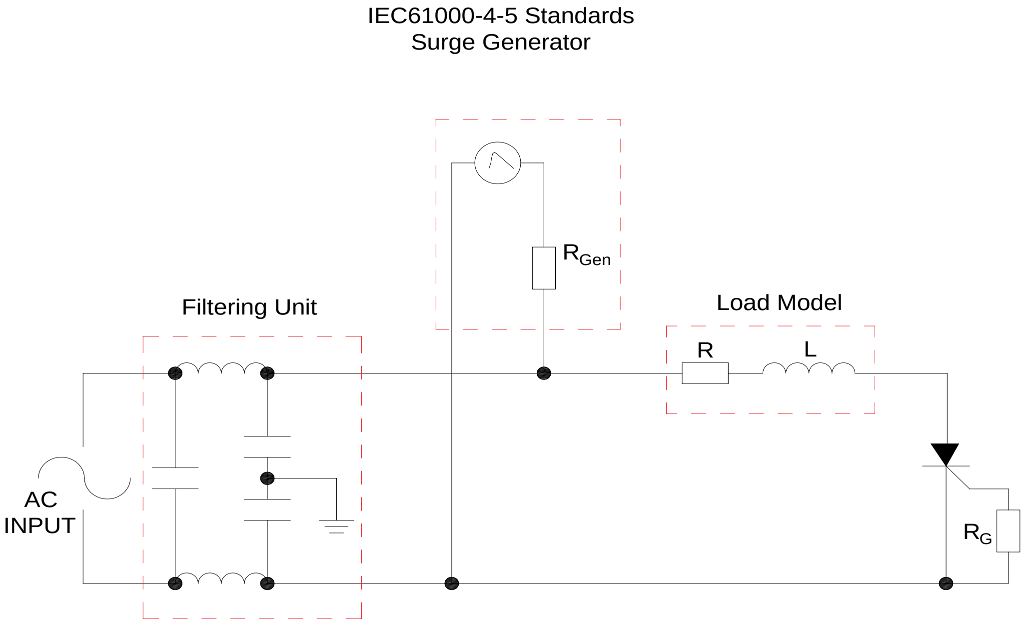


FIG.1:

FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards.



Refer to the application note "Assembly Instructions for Thyristors in Through-hole Package" released by JieJie Microelectronics