



JST12C-800B 12A TRIAC

- - - ()TJ 0 Tw 5.504 0 Td ()Tj 0.222 Tw 0.96 0 0 0.9643 0.46 764.52 Tm [(()-125 (

ELECTRICAL CHARACTERISTICS ($T_j=25$ unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	$V_D=12V$ $R_L=33\Omega$	- -	MAX.	50	mA
				70	
V_{GT}		ALL	MAX.	1	V
V_{GD}	$V_D=V_{DRM}$ $T_j=125$ $R_L=3.3k\Omega$	ALL	MIN.	0.2	V
I_L	$I_G=1.2I_{GT}$	- -	MAX.	50	mA
				100	
I_H	$I_T=500mA$		MAX.	60	mA
dV/dt	$V_D=540V$ Gate Open $T_j=125$		MIN.	1000	V/ μs
$(dV/dt)_c$	$(dI/dt)_c=5.3A/ms$, $T_j=125$		MIN.	12	V/ μs
t_{on}	$I_G=80mA$ $I_A=400mA$ $I_R=40mA$ $T_j=25$		TYP.	5	μs
t_{off}				30	

STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	$I_{TM}=17A$ $t_p=380\mu s$	$T_j=25$	1.5	V
V_{TO}	Threshold voltage	$T_j=125$	0.77	V
R_D	Dynamic resistance	$T_j=125$	35	m Ω
I_{DRM}	$V_D=V_{DRM}$ $V_R=V_{RRM}$	$T_j=25$	μA	
I_{RRM}		$T_j=125$	0.5	mA

THERMAL RESISTANCES

Symbol	Parameter	Value
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ORDERING INFORMATION

J	ST	12	C	-800	B
JieJie Microelectronics Co., Ltd.	Triacs	$I_{T(RMS)}:12A$	C:TO-220C	800: V_{DRM}/V_{RRM} 800V	B: I_{GT1-3} 50mA I_{GT4} 70mA

MARKING

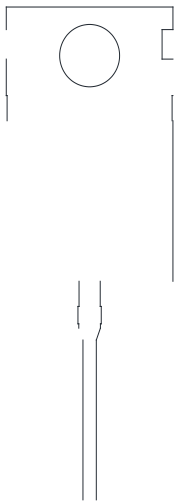
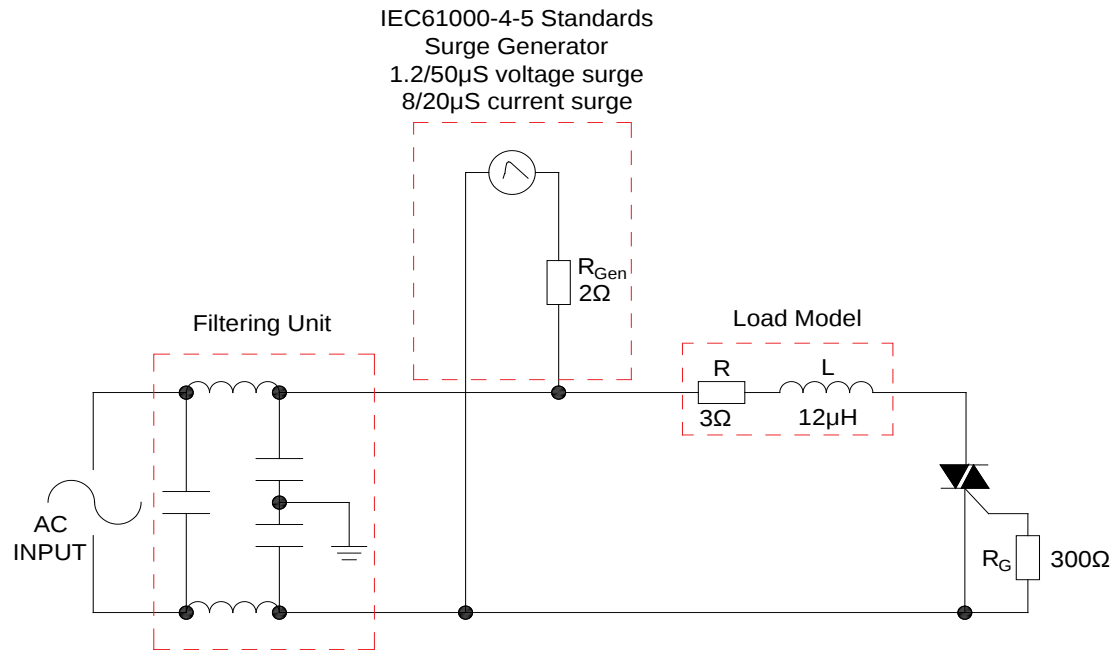


FIG.1: Maximum power dissipation versus RMS on-state current

FIG.2: RMS on-state current versus case temperature

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



ORDERING INFORMATION

Order code	Voltage $V_{\text{DRM}}/V_{\text{RRM}}$ (V)	IGT(mA)		Package	Base qty. (pcs)	Delivery mode
		H- I- J	K			
JST12C-800B	800	50	70	TO-220C	50	Tube

Document Revision History

Date	Revision	Changes
Apr.14, 2023	A.1.0	Last updated
Oct.15, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA

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