

JST20A-800CW 20A TRIAC

Rev.A.1.1

DESCRIPTION:

The JT

Average gate power dissipation ($T_j=125^\circ\text{C}$)	$P_{G(AV)}$	0.5	W
Peak gate power	P_{GM}	10	W
Peak pulse voltage ($T_j=25^\circ\text{C}$; non-repetitive, off-state; FIG.7)	V_{pp}	4	kV

ELECTRICAL CHARACTERISTICS (unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	$V_D=12V$ $R_L=33\Omega$	- -	MAX.	35	mA
V_{GT}		- -	MAX.	1	V
V_{GD}	$V_D=V_{DRM}$ $T_j=125^\circ\text{C}$ $R_L=3.3k\Omega$	- -	MIN.	0.2	V
I_L	$I_G=1.2I_{GT}$	-	MAX.	50	mA
				60	
I_H	$I_T=500mA$		MAX.	40	mA
dV/dt	$V_D=540V$ Gate Open $T_j=125^\circ\text{C}$		MIN.	1600	V/s
$(dI/dt)_C$	$G9$ GWF $j=125^\circ\text{C}$ V_7		MIN.	20	A/ms
t_{on}	$I_G=40mA$ $I_A=200mA$ $I_R=20mA$ $T_j=25^\circ\text{C}$		TYP.	7	s
t_{off}				50	

STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	$I_{TM}=28A$ $t_p=380\mu\text{s}$	$T_j=25^\circ\text{C}$	1.4	V
V_{TO}	Threshold voltage	$T_j=125^\circ\text{C}$	0.75	V
R_D	Dynamic resistance	$T_j=125^\circ\text{C}$	20	$\mu\Omega$
I_{DRM}	$V_D=V_{DRM}$ $V_R=V_{RRM}$	$T_j=25^\circ\text{C}$	5	A
I_{RRM}		$T_j=125^\circ\text{C}$	1	mA

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (AC)	1.9	$^\circ\text{C}/W$
$R_{th(j-a)}$	junction to ambient (AC)	60	$^\circ\text{C}/W$

ORDERING INFORMATION

<u>J</u>	<u>ST</u>	<u>20</u>	<u>A</u>	<u>-800</u>	<u>CW</u>
JieJie Microelectronics Co., Ltd.	Triacs	$I_T(RMS):20A$			
		$A:TO-220A(Ins)$			$CW:I_{GT1-3} 0.35mA$
				$800:V_{DRM}/V_{RRM} 1800V$	

MARKING

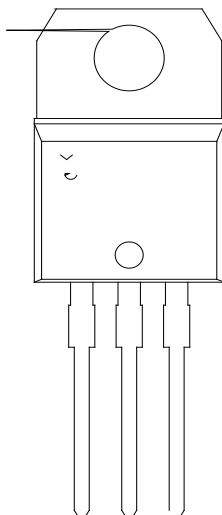


FIG.1: Maximum power dissipation versus RMS on-state current

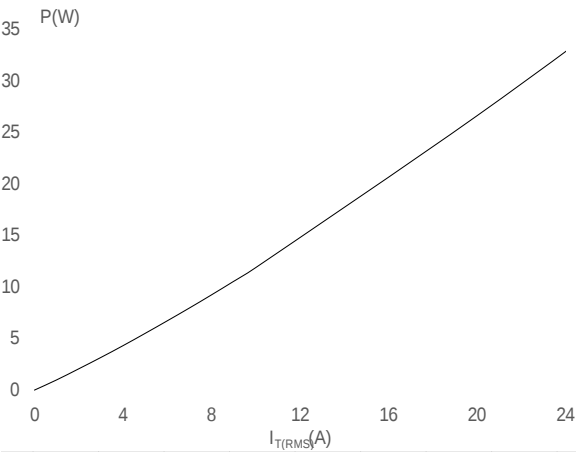


FIG.3: Surge peak on-state current versus number of cycles

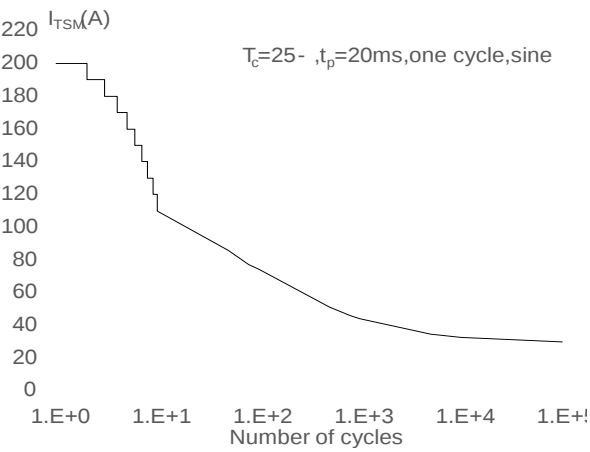


FIG.2: RMS on-state current versus case temperature

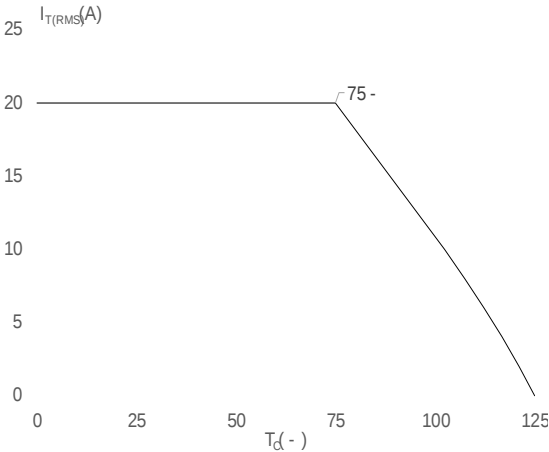


FIG.4: On-state characteristics

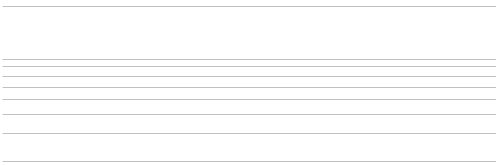
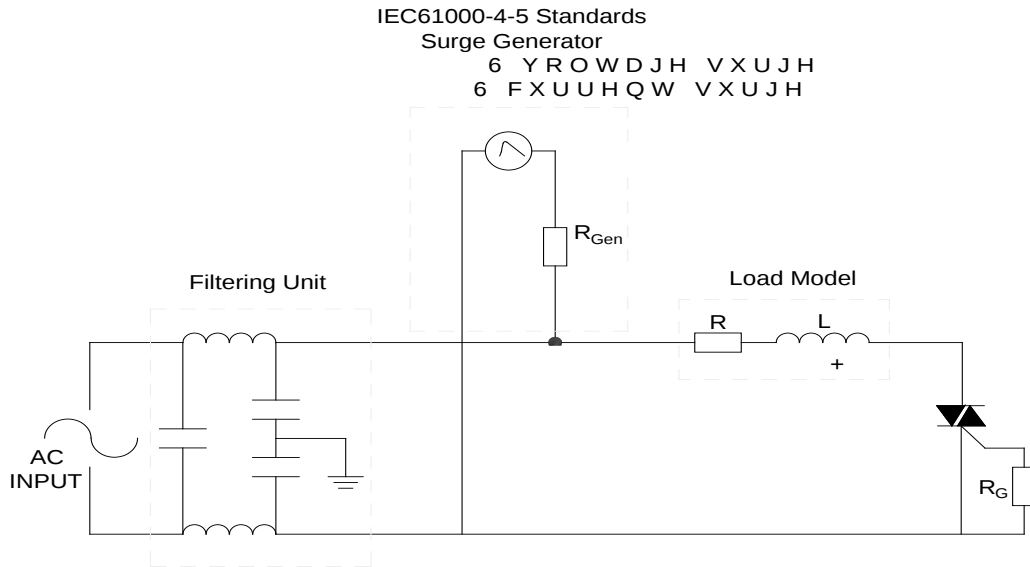


FIG.7 ÖTest circuit for inductive and resistive loads to IEC-61000-4-5 standards



PACKAGE MECHANICAL DATA

