



JST137C-800DX 8A TRIAC

Rev.A.1.1

DESCRIPTION:

The JST137C-800DX triac is suitable for general purpose

AC switching. It can be used as an ON/OFF function. $I_{Tj} = 15.57$ (A) $t_{23} = 0.23$ (s) EMC

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

Symbol	Test Condition	Quadrant	Value	Unit	
I_{GT}	$V_D=12V$ $R_L=33$	- -	MAX.	5	mA
				10	
V_{GT}		ALL	MAX.	1	V
V_{GD}	$V_D=V_{DRM}$ $T_j=125$ $R_L=3.3k$	ALL	MIN.	0.2	V
I_L	$I_G=1.2I_{GT}$	- -	MAX.	20	mA
				30	
I_H	$I_T=100mA$		MAX.	15	mA
dV/dt	$V_D=540V$ Gate Open $T_j=125$		MIN.	80	V/ μs
$(dV/dt)_c$	$(dI/dt)_c=2A/ms$, $T_j=125$		MIN.	2	V/ μs
t_{on}	$I_G=20mA$ $I_A=200mA$ $I_R=20mA$ $T_j=25$		TYP.	1.5	μs
t_{off}				15	

STATIC CHARACTERISTICS

Symbol	Parameter	Value(MAX.)	Unit	
V_{TM}	$I_{TM}=10A$ $t_p=380\mu s$ $T_j=25$	1.6	V	
V_{TO}	Threshold voltage $T_j=125$	0.86	V	
R_D	Dynamic resistance $T_j=125$	75	m	
I_{DRM}	$V_D=V_{DRM}$ $V_R=V_{RRM}$	$T_j=25$	5	μA
I_{RRM}		$T_j=125$	0.45	mA

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (AC)	2.3	/W
$R_{th(j-a)}$	junction to ambient (AC)	60	/W

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



PACKAGE MECHANICAL DATA



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