



JST16C-600B 16A TRIAC

Rev.A.1.1

DESCRIPTION:

The JST16C-600B triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as heating regulation, induction motor starting circuits, for phase control operation in light dimmers, motor speed controllers. From T2 terminals to external heatsink. Package TO-220C is RoHS compliant.

MAIN FEATURES

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Storage junction temperature range	T_{stg}	-40-150	
Operating junction temperature range	T_j	-40-125	
Repetitive peak off-state voltage ($T_j=25^\circ\text{C}$)	V_{DRM}	600	V

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

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	$V_D=12V$ $R_L=33$	- -	MAX.	50	mA
				70	
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.	70	mA
				100	
I_H	$I_T=500mA$		MAX.	60	mA
dV/dt	$V_D=400V$ Gate Open $T_j=125$		MIN.	1200	V/ μs
(dV/dt) _c	(dI/dt) _c =7A/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}				50	

STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	$I_{TM}=22.5A$ $t_p=380\mu s$	$T_j=25$	1.5	V
V_{TO}	Threshold voltage	$T_j=125$	0.77	V
R_D	Dynamic resistance	$T_j=125$	30	m
I_{DRM}	$V_D=V_{DRM}$ $V_R=V_{RRM}$	$T_j=25$	5	μA
I_{RRM}		$T_j=125$	0.4	mA

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
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FIG.1: Maximum power dissipation versus RMS on-state current

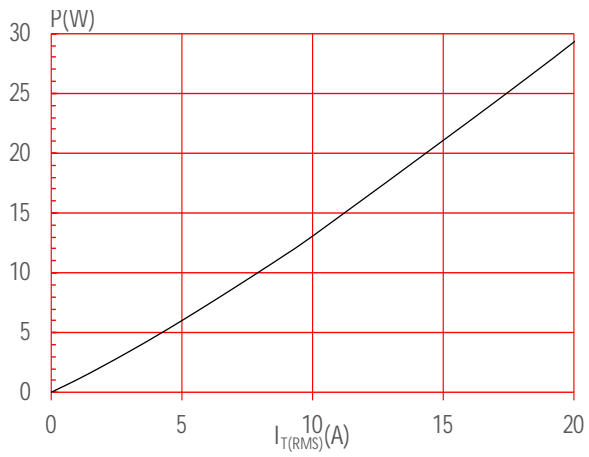


FIG.2: RMS on-state current versus case temperature



FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards 6



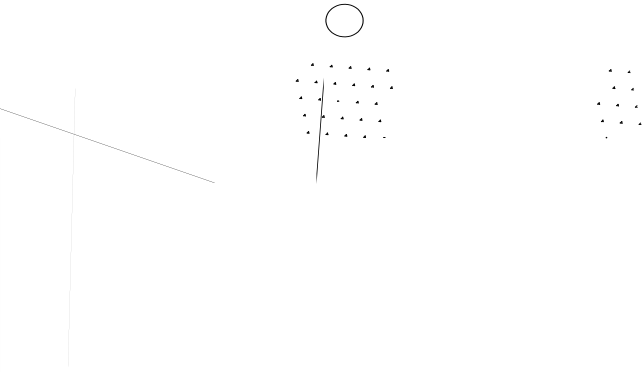
JST16C-600B

Microelect

ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM} (V)		Package	Base qty. (pcs)	Delivery
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PACKAGE MECHANICAL DATA



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