

JIEJIE MICROELECTRONICS CO., LTD.

TRIAC

Rev.A.1.1

This triac is suitable for general purpose AC applications. It can be used as an ON/OFF function in applications such as heating regulation, induction motor speed control, and phase control operation in light dimmers, fan speed controllers. Compared to traditional triacs, this triac has a very high switching capability up to 150°C. By using an external plastic package, it provides a rated insulation voltage of 600V, complying with UL standards (File ref: E252906). This triac is RoHS compliant.

MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Storage temperature range	T_{stg}	-40-150	
Operating temperature range	T_j	-40-150	
Off-state voltage ($T_j=25^\circ\text{C}$)	V_{DRM}	600	V
Reverse voltage ($T_j=25^\circ\text{C}$)	V_{RRM}	600	V
Rated current ($T_c=106^\circ\text{C}$)	$I_{T(RMS)}$	12	A
Surge peak on-state current (10ms, $T_j=25^\circ\text{C}$)	I_{TSM}	120	A
Surge peak on-state current (6ms, $T_j=25^\circ\text{C}$)		132	

Average gate power dissipation ($T_j=150$)	$P_{G(AV)}$	1	W
Peak gate power	P_{GM}	10	W
Peak pulse voltage ($T_j=25$; non-repetitive,off-state;FIG.7)	V_{pp}	4.5	kV

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

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	$V_D=12V R_L=33$	- -	MAX.	35	mA
V_{GT}		- -	MAX.	1	V
V_{GD}	$V_D=V_{DRM} T_j=150$ $R_L=3.3k$	- -	MIN.	0.2	V

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

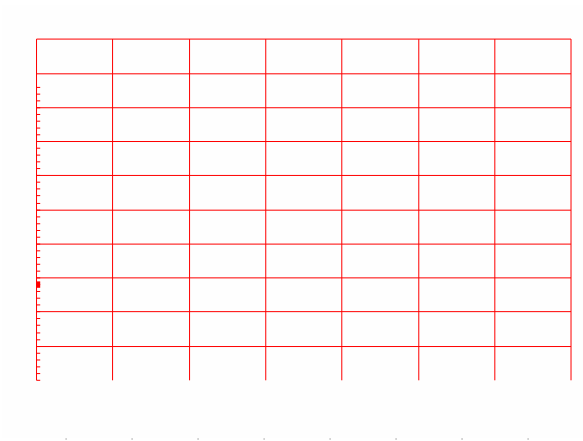


FIG.2: RMS on-state current versus case temperature

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



ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		- -			
T1235H-6F	600	35	TO-220F(Ins)	50	Tube

Document Revision History

Date	Revision
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PACKAGE MECHANICAL DATA



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