

# JIEJIE MICROELECTRONICS CO., LTD.

## 6A TRIAC

Rev.A.1.1

The 6A TRIAC is suitable for general purpose AC switching 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, the 6A TRIAC provides a very high switching capability up to 150°C. By using an external plastic package, the 6A TRIAC provides a rated insulation voltage of 600V, complying with UL standards (File ref: E252906). The 6A TRIAC is RoHS compliant.

Parameter	Symbol	Value	Unit
Storage junction temperature range	$T_{stg}$	-40-150	
Operating junction temperature range	$T_j$	-40-150	
Repetitive peak off-state voltage ( $T_j=25^\circ\text{C}$ )	$V_{DRM}$	600	V
Repetitive peak reverse voltage ( $T_j=25^\circ\text{C}$ )	$V_{RRM}$	600	V
RMS on-state current ( $T_c = 106^\circ\text{C}$ )	$I_{T(RMS)}$	12	A
Non repetitive surge peak on-state current (full cycle, $t_p=20\text{ms}$ , $T_j=25^\circ\text{C}$ )	$I_{TSM}$	120	A
Non repetitive surge peak on-state current (full cycle, $t_p=16.6\text{ms}$ , $T_j=25^\circ\text{C}$ )		132	

12

# T1235H-6F

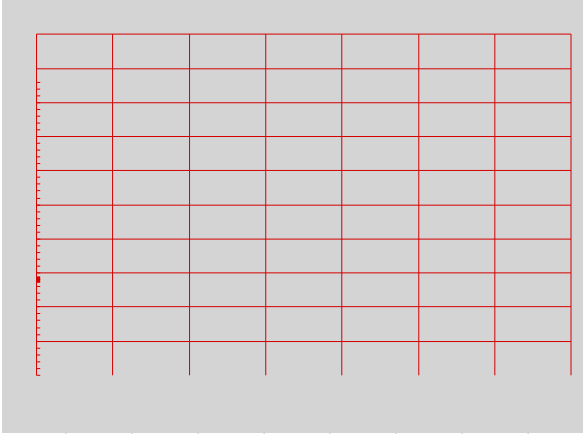
Average gate power dissipation ( $T_j=150$ )	$P_{G(AV)}$	1	W
Peak gate power	$P_{GM}$	10	W
Peak pulse voltage ( $T_j=25$ ; non-repetitive,off-state;FIG.7)	$V_{pp}$	4.5	kV

( $T_j=25$  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



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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