

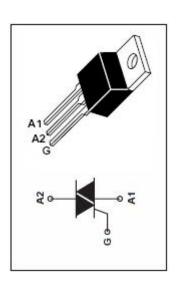
isc Triacs TIC246M

## **FEATURES**

- With TO-220 package
- · Sensitive Gate Triacs
- Glass Passivated
- Max I<sub>GT</sub> of 50 mA (Quadrants 1~3)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	MIN	UNIT
V <sub>DRM</sub>	Repetitive peak off-state voltage	600	V
V <sub>RRM</sub>	Repetitive peak reverse voltage	600	V
I <sub>T(RMS)</sub>	RMS on-state current (full sine wave)T <sub>C</sub> =70°C	16	Α
I <sub>TSM</sub>	Non-repetitive peak on-state current	125	Α
Tj	Operating junction temperature	110	$^{\circ}$
T <sub>stg</sub>	Storage temperature	-45~125	$^{\circ}$
R <sub>th(j-c)</sub>	Thermal resistance, junction to case	1.9	°C/W
R <sub>th(j-a)</sub>	Thermal resistance, junction to ambient	62.5	°C/W



## ELECTRICAL CHARACTERISTICS (T<sub>C</sub>=25℃ unless otherwise specified)

SYMBOL	PARAMETER		CONDITIONS	TYP.	MAX	UNIT
I <sub>DRM</sub>	Repetitive peak off-state current		V <sub>D</sub> =V <sub>DRM</sub> , T <sub>C</sub> =110°C		2.0	mA
I <sub>GT</sub>	Gate trigger current	I	$V_{\text{supply}}$ = 12 V†; R <sub>L</sub> = 10 Ω; $t_{p(g)}$ >20 μ s	12	50	mA
		II		19	50	
		III		16	50	
		IV		34		
I <sub>H</sub>	Holding current		$V_{\text{supply}} = 12 \text{ V}^{\dagger}, I_{\text{G}} = 0 \text{ initial } I_{\text{TM}} = 100 \text{mA}$		40	mA
$V_{GT}$	Gate trigger voltageall quadrant		$V_{\text{supply}}$ = 12 V†; $R_L$ = 10 $\Omega$ ; $t_{p(g)}$ >20 $\mu$ s		2	V
V <sub>TM</sub>	On-state voltage		I <sub>T</sub> = 22.5A; I <sub>G</sub> = 50mA		1.7	V



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