

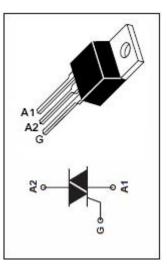
# TIC216M

### FEATURES

- With TO-220 package
- Sensitive Gate Triacs
- Glass Passivated
- Max I<sub>GT</sub> of 5 mA (Quadrants 1~3)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

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_c=70 $^\circ\!\mathrm{C}$	6	A
I <sub>TSM</sub>	Non-repetitive peak on-state current	60	Α
Tj	Operating junction temperature	110	°C
T <sub>stg</sub>	Storage temperature	-45~150	°C
R <sub>th(j-c)</sub>	Thermal resistance, junction to case	2.5	°C <b>/W</b>
R <sub>th(j-a)</sub>	Thermal resistance, junction to ambient	62.5	°C <b>/W</b>

### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)



### **ELECTRICAL CHARACTERISTICS (Tc=25**<sup>°</sup>C unless otherwise specified)

SYMBOL	PARAMETER		CONDITIONS	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>		Ι	V <sub>supply</sub> = 12 V†; R <sub>L</sub> = 10 Ω ; t <sub>p(g)</sub> >20 μ s	5	mA
	Gate trigger current	II		5	
		III		5	
		IV		10	
l <sub>Η</sub>	Holding current		$V_{supply}$ = 12 V†, I <sub>G</sub> = 0 initial I <sub>TM</sub> = 100mA	30	mA
V <sub>GT</sub>	Gate trigger voltage	Ι	- V <sub>supply</sub> = 12 V†; R <sub>L</sub> = 10 Ω ; t <sub>p(g)</sub> >20 μ s	2.2	V
		II		2.2	
		III		2.2	
		IV		3.0	
V <sub>TM</sub>	On-state voltage		I <sub>T</sub> = 8.4A; I <sub>G</sub> = 50mA	1.7	V

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