

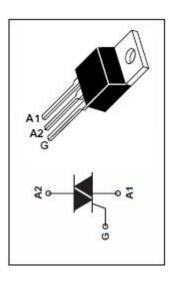
isc Triacs TIC216D

## **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

## ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	MIN	UNIT
$V_{DRM}$	Repetitive peak off-state voltage	400	V
$V_{RRM}$	Repetitive peak reverse voltage	400	V
I <sub>T(RMS)</sub>	RMS on-state current (full sine wave)T <sub>C</sub> =70°C	6	Α
I <sub>TSM</sub>	Non-repetitive peak on-state current	60	Α
T <sub>j</sub>	Operating junction temperature	110	$^{\circ}$
T <sub>stg</sub>	Storage temperature	-45~150	$^{\circ}$
R <sub>th(j-c)</sub>	Thermal resistance, junction to case	2.5	°C/W
R <sub>th(j-a)</sub>	Thermal resistance, junction to ambient	62.5	°C/W



## **ELECTRICAL CHARACTERISTICS (Tc=25℃ 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
Ідт	Gate trigger current	I	V <sub>supply</sub> = 12 V†; R <sub>L</sub> = 10 Ω; t <sub>p(g)</sub> >20 μ s	5	mA
		II		5	
		III		5	
		IV		10	
lΗ	Holding current		$V_{\text{supply}}$ = 12 V†, $I_{\text{G}}$ = 0 initial $I_{\text{TM}}$ = 100mA	30	mA
V <sub>GT</sub>	Gate trigger voltage	I	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	
$V_{TM}$	On-state voltage		I <sub>T</sub> = 8.4A; I <sub>G</sub> = 50mA	1.7	V



Notice ·

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.

