

**Triacs**

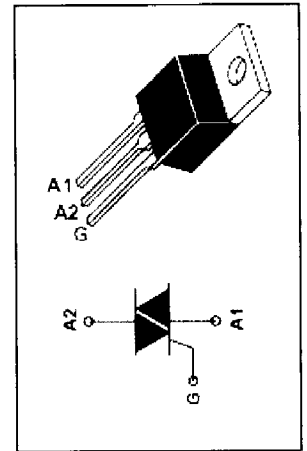
**TIC216D**

**FEATURES**

- With TO-220 package
- Sensitive Gate Triacs
- Glass Passivated
- Max  $I_{GT}$  of 5 mA (Quadrants 1~3)

**ABSOLUTE MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ )**

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



**ELECTRICAL CHARACTERISTICS ( $T_C=25^\circ\text{C}$  unless otherwise specified)**

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT	
$I_{DRM}$	Repetitive peak off-state current	$V_D=V_{DRM}, T_C=110^\circ\text{C}$	2.0	mA	
$I_{GT}$	Gate trigger current	$V_{supply} = 12\text{ V}\uparrow; R_L = 10\ \Omega; t_{p(g)} > 20\ \mu\text{s}$	I	5	mA
			II	5	
			III	5	
			IV	10	
$I_H$	Holding current	$V_{supply} = 12\text{ V}\uparrow, I_G = 0$ initial $I_{TM} = 100\text{mA}$	30	mA	
$V_{GT}$	Gate trigger voltage	$V_{supply} = 12\text{ V}\uparrow; R_L = 10\ \Omega; t_{p(g)} > 20\ \mu\text{s}$	I	2.2	V
			II	2.2	
			III	2.2	
			IV	3.0	
$V_{TM}$	On-state voltage	$I_T = 8.4\text{A}; I_G = 50\text{mA}$	1.7	V	

