

**Triacs**

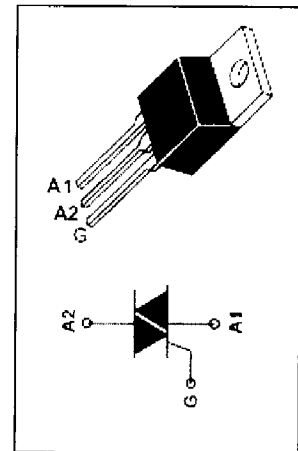
**TIC225D**

**FEATURES**

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

**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) $T_C=70^\circ\text{C}$	8	A
$I_{TSM}$	Non-repetitive peak on-state current	70	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	$V_{supply} = 12\text{ V}\dagger$ ; $R_L = 10\ \Omega$ ; $t_{p(g)} > 20\ \mu\text{s}$	I	5	mA
			II	20	
			III	10	
			IV	30	
$I_H$	Holding current	$V_{supply} = 12\text{ V}\dagger$ , $I_G = 0$ initial $I_{TM} = 100\text{mA}$	20	mA	
$V_{GT}$	Gate trigger voltage <b>all quadrant</b>	$V_{supply} = 12\text{ V}\dagger$ ; $R_L = 10\ \Omega$ ; $t_{p(g)} > 20\ \mu\text{s}$	2	V	
$V_{TM}$	On-state voltage	$I_T = 12\text{A}$ ; $I_G = 50\text{mA}$	2.1	V	

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