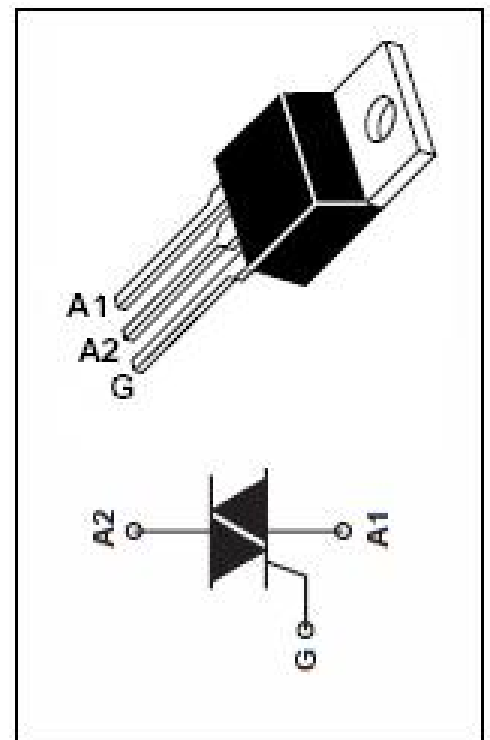


**DESCRIPTION**

- Sensitive Gate Triacs
- 8A RMS ,70A Peak
- Glass passivated Wafer
- 400V to 800V off-state Voltage
- Max  $I_{GT}$  of 5mA(Quadrants 1)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

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

SYMBOL	PARAMETER	VALUE	UNIT	
$V_{DRM}$	Repetitive peakoff-state voltage	TIC225D	400	V
		TIC225M	600	
		TIC225S	700	
		TIC225N	800	
$V_{RRM}$	Repetitive peakreverse voltage	TIC225D	400	V
		TIC225M	600	
		TIC225S	700	
		TIC225N	800	
$I_{T(RMS)}$	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	
$P_{GM}$	Peak gate power $P_W \leq 200 \mu\text{s}$	2.2	W	
$P_{G(AV)}$	Average gate power	0.9	W	
$T_j$	Operating Junction temperature	110	$^\circ\text{C}$	
$T_{stg}$	Storage temperature	-40 ~+125	$^\circ\text{C}$	



**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
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**

 T<sub>c</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT	
I <sub>RRM</sub>	Repetitive peak reverse current	V <sub>RM</sub> =V <sub>R<sub>RM</sub></sub> , V <sub>RM</sub> =V <sub>R<sub>RM</sub></sub> , T <sub>J</sub> =110 °C	0.4 2.0	mA	
I <sub>DRM</sub>	Repetitive peak off-state current	V <sub>DM</sub> =V <sub>D<sub>RM</sub></sub> , V <sub>DM</sub> =V <sub>D<sub>RM</sub></sub> , T <sub>J</sub> =110 °C	0.4 2.0	mA	
I <sub>GT</sub>	Gate trigger current	V <sub>supply</sub> = 12 V†; R <sub>L</sub> = 10 Ω; t <sub>p(g)</sub> >20 μ s	I	5	mA
			II	20	
			III	10	
			IV	30	
I <sub>H</sub>	Holding current	V <sub>supply</sub> = 12 V†, I <sub>G</sub> = 0 initial I <sub>TM</sub> = 100mA	20	mA	
V <sub>GT</sub>	Gate trigger voltage	V <sub>supply</sub> = 12 V†; R <sub>L</sub> = 10 Ω; t <sub>p(g)</sub> >20 μ s	I	2.0	V
			II	2.0	
			III	2.0	
			IV	2.0	
V <sub>TM</sub>	On-state voltage	I <sub>T</sub> = 12A; I <sub>G</sub> = 50mA	2.1	V	

**NOTICE:**

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