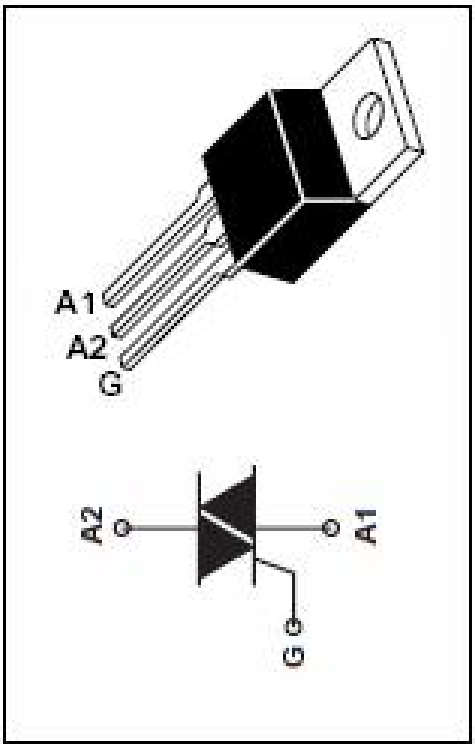
isc Triacs TIC216series

DESCRIPTION

- Sensitive Gate Triacs
- 6A RMS
- Glass passivated Wafer
- 400V to 800V off-state Voltage
- Max I_{GT} of 5mA(Quadrants 1-3)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER		VALUE	UNIT
V_{DRM}	Repetitive peakoff-state voltage	TIC216D	400	V
		TIC216M	600	
		TIC216S	700	
		TIC216N	800	
V_{RRM}	Repetitive peakreverse voltage	TIC216D	400	V
		TIC216M	600	
		TIC216S	700	
		TIC216N	800	
$I_{T(RMS)}$	RMS on-state current (full sine wave)T_C=70℃		6	A
I_{TSM}	Non-repetitive peak on-state current		60	A
P_{GM}	Peak gate power P_W≤200 μ s		2.2	W
$P_{G(AV)}$	Average gate power		0.9	W
T_j	Operating Junction temperature		110	℃
T_{stg}	Storage temperature		-40 ~+125	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	2.5	℃/W
$R_{th\ j\text{-}a}$	Thermal Resistance,Junction to Ambient	62.5	℃/W

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MAX	UNIT
I_{RRM}	Repetitive peak reverse current		$V_{RM}=V_{RRM}$, $V_{RM}=V_{RRM}$, Tj=110℃	0.4 2.0	mA
I_{DRM}	Repetitive peak off-state current		$V_{DM}=V_{DRM}$, $V_{DM}=V_{DRM}$, Tj=110℃	0.4 2.0	mA
I_{GT}	Gate trigger current	I	V_{supply} = 12 V†; R_L= 10Ω ; $t_{p(g)}$ >20 μ s	5	mA
		II		5	
		III		5	
		IV		10	
I_H	Holding current		V_{supply} = 12 V†, I_G= 0 initial I_{TM}= 100mA	30	mA
V_{GT}	Gate trigger voltage	I	V_{supply} = 12 V†; R_L= 10Ω ; $t_{p(g)}$ >20 μ s	2.2	V
		II		2.2	
		III		2.2	
		IV		3.0	
V_{TM}	On-state voltage		I_T= 8.4A; I_G= 50mA	1.7	V

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