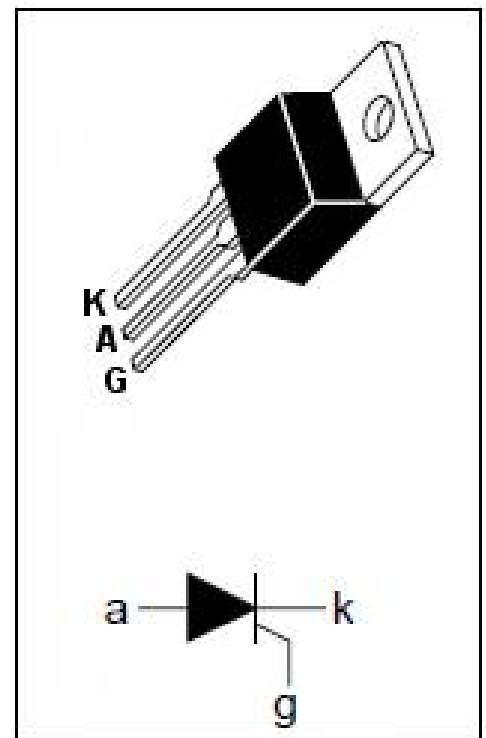


**isc Thyristors**
**TIC106series**
**DESCRIPTION**

- 5A continuous on-state current
- 30A surge-current
- Glass passivated
- Max  $I_{GT}$  of 200  $\mu$  A
- 100% 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 voltage	peakoff-state	TIC106D 400	V
			TIC106M 600	
			TIC106S 700	
			TIC106N 800	
$V_{RRM}$	Repetitive voltage	peakreverse	TIC106D 400	V
			TIC106M 600	
			TIC106S 700	
			TIC106N 800	
$I_{T(AV)}$	On-state current $T_c=80^\circ\text{C}$		3.2	A
$I_{T(RMS)}$	RMS on-state current $T_c=80^\circ\text{C}$		5	A
$I_{TM}$	Surge peak on-state current		30	A
$P_{GM}$	Peak gate power $P_W \leq 300 \mu$ s		1.3	W
$P_{G(AV)}$	Average gate power		0.3	W
$T_j$	Operating Junction temperature		110	$^\circ\text{C}$
$T_{stg}$	Storage temperature		-40 ~+125	$^\circ\text{C}$



**isc Thyristors**
**TIC106series**
**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MIN	TYP	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case			3.5	$^{\circ}C/W$
$R_{th\ j-a}$	Thermal Resistance, Junction to Ambient			62.5	$^{\circ}C/W$

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$I_{RRM}$	Repetitive peak reverse current	$V_{RM}=V_{RRM}$ , $V_{RM}=V_{RRM}$ , $T_j=110^{\circ}C$			0.4 1.0	mA
$I_{DRM}$	Repetitive peak off-state current	$V_{DM}=V_{DRM}$ , $V_{DM}=V_{DRM}$ , $T_j=110^{\circ}C$			0.4 1.0	mA
$V_{TM}$	On-state voltage	$I_{TM}=5A$			1.7	V
$I_{GT}$	Gate-trigger current	$V_{AA}=6V$ ; $R_L=1K\ \Omega$			200	$\mu A$
$V_{GT}$	Gate-trigger voltage	$V_{AA}=6V$ ; $R_L=100\ \Omega$			1.2	V
$I_H$	Holding current	$V_{AA}=6V$ ; $R_{GK}=1k\ \Omega$ , $I_T=10mA$			5	mA

**NOTICE:**

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