

**Thyristors**

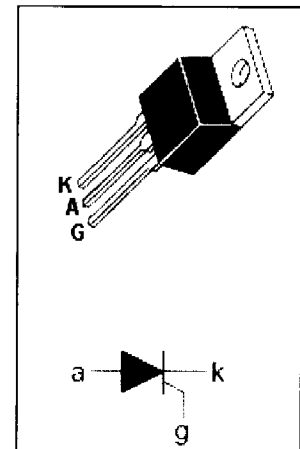
**TIC116M**

**APPLICATIONS**

- 8A continuous on-state current
- 80A surge-current
- Glass passivated
- Max  $I_{GT}$  of 20mA

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

SYMBOL	PARAMETER	MIN	UNIT
$V_{DRM}$	Repetitive peak off-state voltage	600	V
$V_{RRM}$	Repetitive peak reverse voltage	600	V
$I_{T(AV)}$	On-state current $T_c=80^\circ\text{C}$	5	A
$I_{T(RMS)}$	RMS on-state current $T_c=80^\circ\text{C}$	8	A
$I_{TM}$	Surge peak on-state current	80	A
$P_{GM}$	Peak gate power $P_W \leq 300 \mu\text{s}$	5	W
$P_{G(AV)}$	Average gate power	1	W
$T_j$	Operating Junction temperature	110	$^\circ\text{C}$
$T_{stg}$	Storage temperature	-40 ~ +125	$^\circ\text{C}$
$R_{th(j-c)}$	Thermal resistance, junction to case	3	$^\circ\text{C/W}$
$R_{th(j-a)}$	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	MIN	TYP.	MAX	UNIT
$I_{RRM}$	Repetitive peak reverse current	$V_{RM}=V_{RRM}$ , $T_j=110^\circ\text{C}$			2.0	mA
$I_{DRM}$	Repetitive peak off-state current	$V_{RM}=V_{RRM}$ , $T_j=110^\circ\text{C}$			2.0	mA
$V_{TM}$	On-state voltage	$I_{TM}=8\text{A}$			1.7	V
$I_{GT}$	Gate-trigger current	$V_{AA}=6\text{V}$ ; $R_L=100\ \Omega$			20	mA
$V_{GT}$	Gate-trigger voltage	$V_{AA}=6\text{V}$ ; $R_L=100\ \Omega$			1.5	V
$I_H$	Holding current	$V_{AA}=6\text{V}$ ; $R_{GK}=1\text{k}\ \Omega$ , $I_T=100\text{mA}$			40	mA

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