

## isc Thyristors

## C106D

## FEATURES

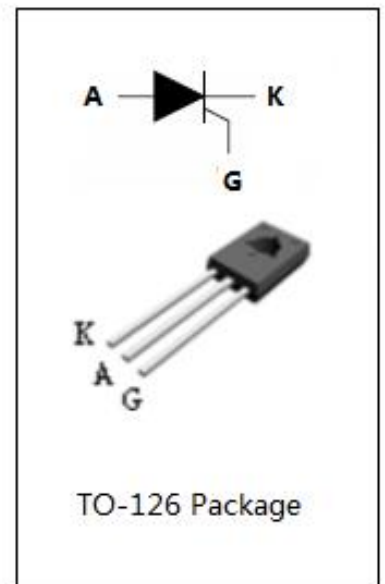
- Glassivated surface for reliability and uniformity
- Practical level triggering and holding characteristics
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## APPLICATIONS

- Designed for high volume consumer applications such as temperature, light, and speed control; process and remote control, and warning systems where reliability of operation is important.

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
$I_{T(AV)}$	On-state current $T_A=30^\circ\text{C}$	2.55	A
$I_{T(RMS)}$	RMS on-state current	4	A
$I_{TM}$	Surge peak on-state current	20	A
$P_{GM}$	Peak gate power	0.5	W
$P_{G(AV)}$	Average gate power	0.1	W
$T_j$	Operating Junction temperature	110	$^\circ\text{C}$
$T_{stg}$	Storage temperature	-40 ~ +150	$^\circ\text{C}$
$R_{th(j-c)}$	Thermal resistance, junction to case	3	$^\circ\text{C/W}$
$R_{th(j-a)}$	Thermal resistance, junction to ambient	75	$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS ( $T_c=25^\circ\text{C}$  unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$I_{RRM}$	Repetitive peak reverse current	$V_{RM}=V_{RRM}$ , $V_{RM}=V_{RRM}$ , $T_j=110^\circ\text{C}$			0.01 0.1	mA
$I_{DRM}$	Repetitive peak off-state current	$V_{DM}=V_{DRM}$ , $V_{DM}=V_{DRM}$ , $T_j=110^\circ\text{C}$			0.01 0.1	mA
$V_{TM}$	On-state voltage	$I_{TM}=4\text{A}$			2.2	V
$I_{GT}$	Gate-trigger current	$V_{AK}=6\text{V}$ ; $R_L=100\ \Omega$			200	$\mu\text{A}$
$V_{GT}$	Gate-trigger voltage	$V_{AK}=6\text{V}$ ; $R_L=100\ \Omega$			0.8	V
$I_H$	Holding current	$V_{AA}=12\text{V}$ ; $R_{GK}=1\text{k}\ \Omega$			3	mA

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