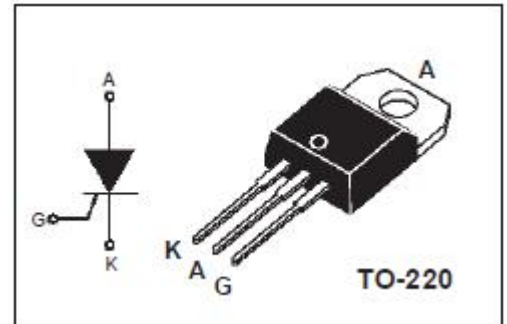


## isc Thyristors

## C122B1

## DESCRIPTION

- With TO-220 packaging
- High heat dissipation and durability
- Thermowatt construction for low thermal
- Glass passivated junctions and center gate fire for greater parameter uniformity and stability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



## APPLICATIONS

- Switching applications

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

SYMBOL	PARAMETER	MIN	UNIT
$V_{DRM}$	Repetitive peak off-state voltage	200	V
$V_{RRM}$	Repetitive peak reverse voltage	200	V
$I_{T(AV)}$	Average on-state current	8	A
$I_{TSM}$	Surge non-repetitive on-state current ( 1/2 cycle,sine wave;60HZ; $T_c=75^\circ\text{C}$ )	90	A
$P_{G(AV)}$	Average gate power dissipation		
	$T_p=8.3\text{ms}; T_c=70^\circ\text{C}$	0.5	W
$T_j$	Operating junction temperature	-40~125	$^\circ\text{C}$
$T_{stg}$	Storage temperature	-40~150	$^\circ\text{C}$

**isc Thyristors**
**C122B1**
**ELECTRICAL CHARACTERISTICS ( $T_c=25^\circ\text{C}$  unless otherwise specified)**

SYMBOL	PARAMETER	CONDITIONS		MIN	MAX	UNIT
$I_{RRM}$	Repetitive peak reverse current	$V_{RM}=V_{RRM}$ $V_{DM}=V_{DRM}$	$T_j=25^\circ\text{C}$		10	mA
$I_{DRM}$	Repetitive peak off-state current		$T_j=125^\circ\text{C}$		0.5	
$V_{TM}$	On-state voltage	$I_{TM}=16\text{A}$			1.83	V
$I_{GT}$	Gate-trigger current	$V_D=12\text{V}; R_L=100\ \Omega @T_j=25^\circ\text{C}$ $T_j=-40^\circ\text{C}$			25 40	mA
$V_{GT}$	Gate-trigger voltage	$V_D=12\text{V}; R_L=100\ \Omega @T_j=25^\circ\text{C}$ $T_j=-40^\circ\text{C}$			1.5 2.0	V
$R_{th(j-c)}$	Thermal resistance	Junction to case			1.8	$^\circ\text{C/W}$

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