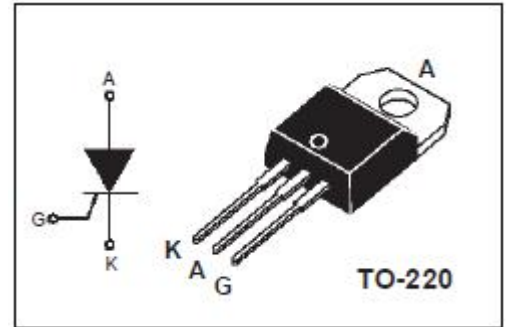


isc Thyristors

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;Tc=75℃)	90	A
P _{G(AV)}	Average gate power dissipation Tp=8.3ms;Tc=70℃	0.5	W
T _j	Operating junction temperature	-40~125	℃
T _{stg}	Storage temperature	-40~150	℃

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

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