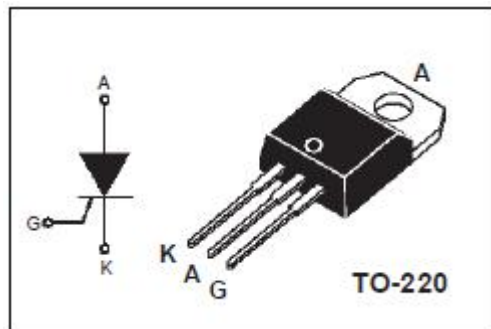


isc Thyristors

CLA30E1200PB

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	1200	V
V_{RRM}	Repetitive peak reverse voltage	1200	V
$I_{\text{T(AV)}}$	Average forward current $T_c=150^\circ\text{C}$	30	A
$I_{\text{T(RMS)}}$	RMS on-state current $T_c=150^\circ\text{C}$	47	A
I_{TSM}	Surge non-repetitive on-state current (1/2 cycle,sine wave;50HZ; $T_c=125^\circ\text{C}$)	300	A
$P_{\text{G(AV)}}$	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	$^\circ\text{C}$

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

SYMBOL	PARAMETER	CONDITIONS		MIN	MAX	UNIT
I_{RRM}	Repetitive peak reverse current	$V_{RM}=V_{RRM}$ $V_{DM}=V_{DRM}$	$T_J=25^{\circ}\text{C}$		0.01	mA
I_{DRM}	Repetitive peak off-state current		$T_J=125^{\circ}\text{C}$		2.0	
V_{TM}	On-state voltage	$I_{TM}=30\text{A}$			1.3	V
I_{GT}	Gate-trigger current	$V_D=6\text{V}$			30	mA
V_{GT}	Gate-trigger voltage	$V_D=6\text{V}$			1.3	V
$R_{th(j-c)}$	Thermal resistance	Junction to case			0.5	$^{\circ}\text{C}/\text{W}$

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