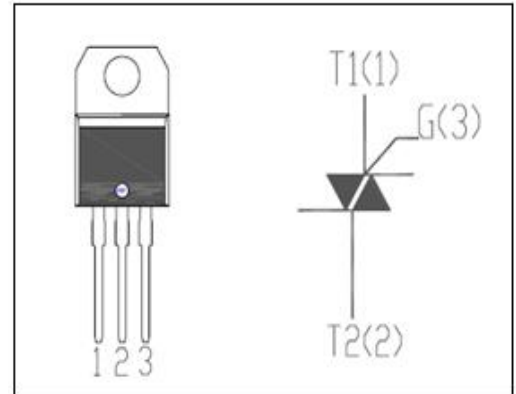


isc Thyristors
BCR16CM-12LB
DESCRIPTION

- With TO-220 packaging
- Operating in 3 quadrants
- High commutation capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching applications
- Phase control
- Static switching on inductive or resistive load


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

SYMBOL	PARAMETER	MAX	UNIT
V_{DRM}	Repetitive peak off-state voltage	600	V
V_{RRM}	Repetitive peak reverse voltage	600	V
$I_{T(RSM)}$	Average on-state current	@ $T_c=125^{\circ}\text{C}$ 16	A
I_{TSM}	Surge non-repetitive on-state current	60HZ 170	A
$P_{G(AV)}$	Average gate power dissipation (over any 20 ms period)	0.5	W
T_j	Operating junction temperature	-40~125	$^{\circ}\text{C}$
T_{stg}	Storage temperature	-40~150	$^{\circ}\text{C}$

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

SYMBOL	PARAMETER	CONDITIONS		MIN	MAX	UNIT
I_{RRM}	Repetitive peak reverse current	$V_R=V_{RRM}$ Rated; $V_D=V_{DRM}$ Rated;	$T_j=125^\circ\text{C}$		2.0	mA
I_{DRM}	Repetitive peak off-state current					
V_{TM}	On-state voltage	$I_T=25\text{A}$			1.5	V
I_{GT}	Gate-trigger current	$V_D=6\text{V}; R_L=6\ \Omega; R_G=330\ \Omega$		I	30	mA
				II	30	
				III	30	
V_{GT}	Gate-trigger voltage	$V_D=6\text{V}; R_L=6\ \Omega; R_G=330\ \Omega;$			1.5	V
$R_{th(j-mb)}$	Junction to mounting base	Half cycle			1.4	$^\circ\text{C}/\text{W}$

NOTICE:

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