

## isc Thyristors

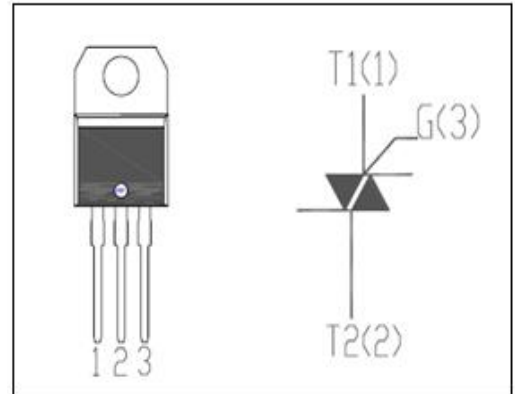
## BCR16CM-12LB

## 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
$V_{\text{DRM}}$	Repetitive peak off-state voltage		600	V
$V_{\text{RRM}}$	Repetitive peak reverse voltage		600	V
$I_{\text{T(RSM)}}$	Average on-state current	@ $T_c=125^{\circ}\text{C}$	16	A
$I_{\text{TSM}}$	Surge non-repetitive on-state current	60HZ	170	A
$P_{\text{G(AV)}}$	Average gate power dissipation ( over any 20 ms period )		0.5	W
$T_j$	Operating junction temperature		-40~125	$^{\circ}\text{C}$
$T_{\text{stg}}$	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 <sub>RRM</sub>	Repetitive peak reverse current	V <sub>R</sub> =V <sub>RRM</sub> Rated; V <sub>D</sub> =V <sub>DRM</sub> Rated;	T <sub>j</sub> =125℃		2.0	mA
I <sub>DRM</sub>	Repetitive peak off-state current					
V <sub>TM</sub>	On-state voltage	I <sub>T</sub> =25A			1.5	V
I <sub>GT</sub>	Gate-trigger current	V <sub>D</sub> =6V;R <sub>L</sub> =6 Ω ;R <sub>G</sub> =330 Ω	I		30	mA
			II		30	
			III		30	
V <sub>GT</sub>	Gate-trigger voltage	V <sub>D</sub> =6V;R <sub>L</sub> =6 Ω ;R <sub>G</sub> =330 Ω ;			1.5	V
R <sub>th</sub> (j-mb)	Junction to mounting base	Half cycle			1.4	℃/W

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