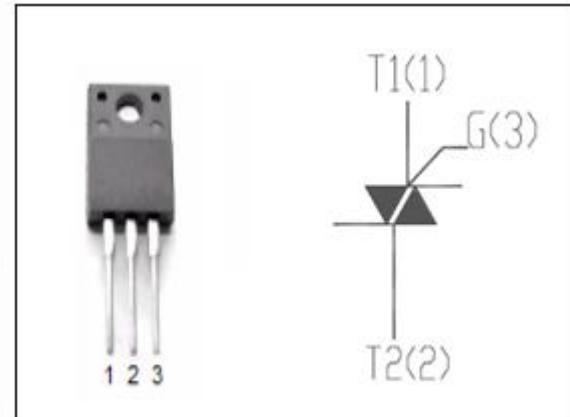


isc Thyristors
BCR16PM-12LG
DESCRIPTION

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


APPLICATIONS

- Solid state relays; heating and cooking appliances
- Switching applications

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
$I_{T(AV)}$	Average on-state current $T_c=87^\circ\text{C}$	16	A
I_{TSM}	Surge non-repetitive on-state current 60HZ	160	A
$P_{G(AV)}$	Average gate power dissipation (over any 20 ms period)	0.5	W
T_j	Operating junction temperature	-40~150	$^\circ\text{C}$
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;	$T_j=150^\circ\text{C}$	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
$R_{th(j-c)}$	Junction to case			2.9	$^\circ\text{C}/\text{W}$