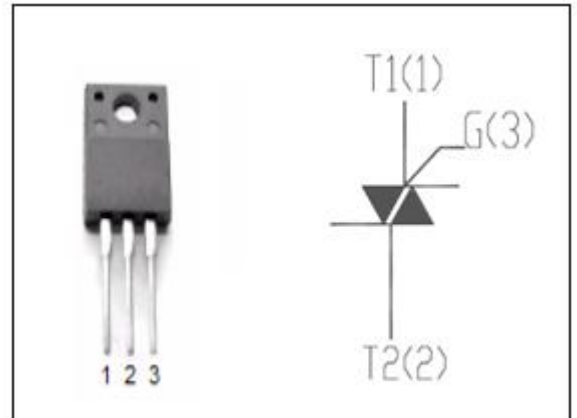


isc Thyristors
BCR3LM-12RB
DESCRIPTION

- 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
$I_{\text{T(AV)}}$	Average on-state current		3	A
I_{TSM}	Surge non-repetitive on-state current	60HZ	30	A
$P_{\text{G(AV)}}$	Average gate power dissipation (over any 20 ms period)		0.3	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	$I_T=4.5\text{A}$			1.5	V
I_{GT}	Gate-trigger current	$V_D=6\text{V}; R_L=6\ \Omega; R_G=330\ \Omega$		I	15	mA
				II	15	
				III	15	
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	Half cycle			5.2	$^\circ\text{C/W}$

NOTICE:

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