

isc Thyristors

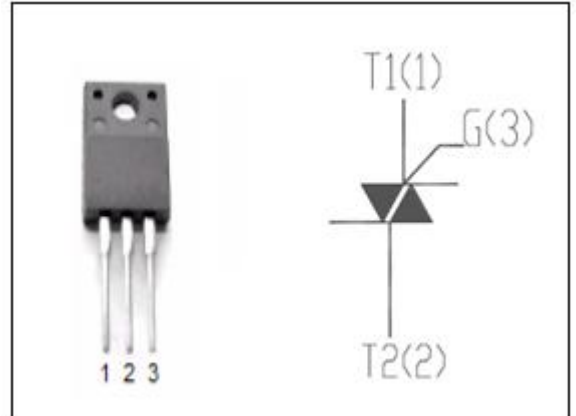
BCR5LM-12RB

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		MIN	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		5	A
I_{TSM}	Surge non-repetitive on-state current	60HZ	50	A
$P_{\text{G(AV)}}$	Average gate power dissipation (over any 20 ms period)		0.3	W
T_j	Operating junction temperature		-40~150	°C
T_{stg}	Storage temperature		-40~150	°C

ELECTRICAL CHARACTERISTICS (T_c=25°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℃		2.0	mA
I _{DRM}	Repetitive peak off-state current					
V _{TM}	On-state voltage	I _T =7A			1.5	V
I _{GT}	Gate-trigger current	V _D =6V;R _L =6 Ω ;R _G =330 Ω	I		15	mA
			II		15	
			III		15	
V _{GT}	Gate-trigger voltage	V _D =6V;R _L =6 Ω ;R _G =330 Ω			1.5	V
R _{th} (j-c)	Junction to case	Half cycle			4.9	℃/W

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