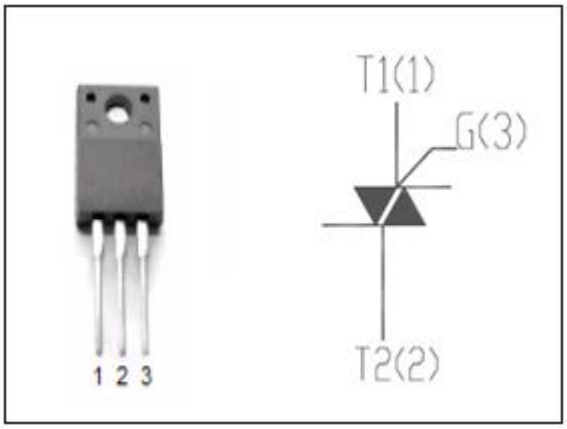
isc Thyristors BCR16PM-12LA

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℃)

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 @Tc=113℃		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) @Tc=150℃		0.5	W
T_j	Operating junction temperature		-40~125	℃
T_{stg}	Storage temperature		-40~125	℃

ELECTRICAL CHARACTERISTICS (T_C=25℃ 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;	Tj=25℃; Tj=150℃		50 2000	μA
I_{DRM}	Repetitive peak off-state current					
V_{TM}	On-state voltage	I_T=25A			1.5	V
I_{GT}	Gate-trigger current	V_D =6V;R_L=6Ω;RG=330Ω	I		30	mA
			II		30	
			III		30	
V_{GT}	Gate-trigger voltage	V_D =6V;R_L=6Ω;RG=330Ω			1.5	V
Rth (j-c)	Junction to case	Half cycle			3.0	℃/W