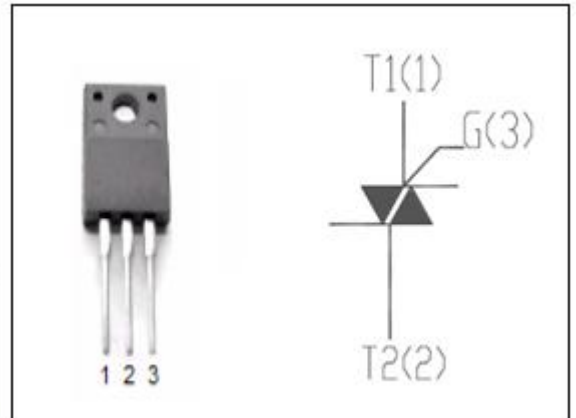


isc Thyristors
BCR12PM-12LA
DESCRIPTION

- 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°C)

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	@T _c =113°C	12	A
I _{TSM}	Surge non-repetitive on-state current	60HZ	120	A
P _{G(AV)}	Average gate power dissipation (over any 20 ms period) @T _c =150°C		0.5	W
T _j	Operating junction temperature		-40~125	°C
T _{stg}	Storage temperature		-40~125	°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 =25°C; T _j =150°C		50	μA
I _{DRM}	Repetitive peak off-state current				2000	
V _{TM}	On-state voltage	I _T =20A			1.6	V
I _{GT}	Gate-trigger current	V _D =6V;R _L =6 Ω ;RG=330 Ω		I	30	mA
				II	30	
				III	30	
V _{GT}	Gate-trigger voltage	V _D =6V;R _L =6 Ω ;RG=330 Ω			1.5	V
R _{th(j-c)}	Junction to case	Half cycle			3.5	°C/W