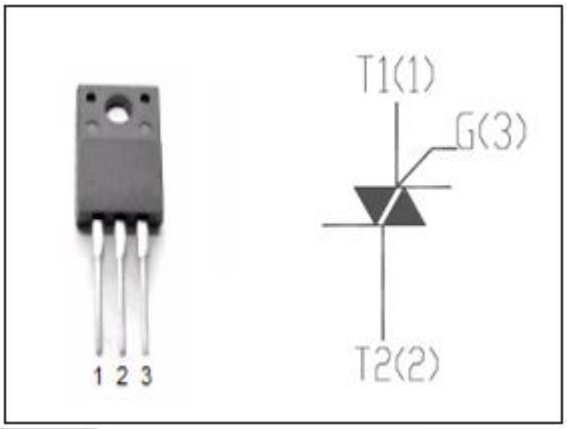
isc Thyristors — BCR30AM-12LB

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=92℃	30	A
I_{TSM}	Surge non-repetitive on-state current	60HZ	300	A
$P_{G(AV)}$	Average gate power dissipation (over any 20 ms period)		0.5	W
T_j	Operating junction temperature		-40~150	℃
T_{stg}	Storage temperature		-40~150	℃

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=125℃		3000	μA
I_{DRM}	Repetitive peak off-state current		Tj=150℃		5000	
V_{TM}	On-state voltage	I_T=45A			1.5	V
I_{GT}	Gate-trigger current	V_D =6V;R_L=6Ω;RG=330Ω	I		50	mA
			II		50	
			III		50	
V_{GT}	Gate-trigger voltage	V_D =6V;R_L=6Ω;RG=330Ω			2.5	V
Rth (j-c)	Junction to case	Half cycle			4.0	℃/W

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