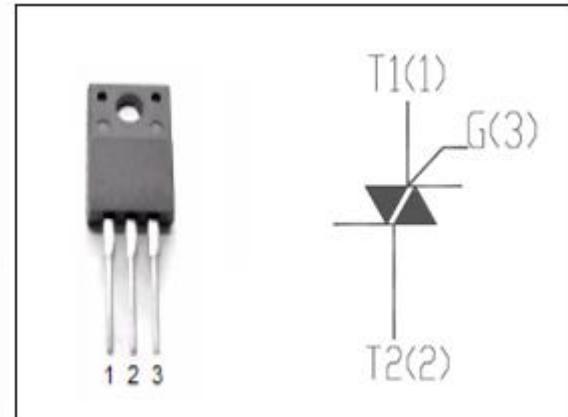


isc Thyristors
BCR30AM-12LB
DESCRIPTION

- 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($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	MAX	UNIT	
V_{DRM}	Repetitive peak off-state voltage	600	V	
V_{RRM}	Repetitive peak reverse voltage	600	V	
$I_{T(RSM)}$	Average on-state current @ $T_c=92^\circ\text{C}$	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	°C	
T_{stg}	Storage temperature	-40~150	°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;	$T_j=125^\circ\text{C}$	3000 5000	μA
I_{DRM}	Repetitive peak off-state current				
V_{TM}	On-state voltage	$I_T=45\text{A}$		1.5	V
I_{GT}	Gate-trigger current	$V_D=6\text{V}; R_L=6\Omega; RG=330\Omega$	I	50	mA
			II	50	
			III	50	
V_{GT}	Gate-trigger voltage	$V_D=6\text{V}; R_L=6\Omega; RG=330\Omega$		2.5	V
$R_{th(j-c)}$	Junction to case	Half cycle		4.0	°C/W