

# isc Thyristors

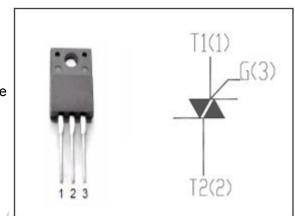
## BCR30AM-12LB

#### **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(Ta=25℃)

SYMBOL	PARAMETER	MAX	UNIT
$V_{DRM}$	Repetitive peak off-state voltage	600	V
$V_{RRM}$	Repetitive peak reverse voltage	600	V
I <sub>T(RSM)</sub>	Average on-state current @Tc=92°C	30	Α
I <sub>TSM</sub>	Surge non-repetitive on-state current 60HZ	300	Α
$P_{G(AV)}$	Average gate power dissipation ( over any 20 ms period )	0.5	W
Tj	Operating junction temperature	-40~150	$^{\circ}$
T <sub>stg</sub>	Storage temperature	-40~150	$^{\circ}\!\mathbb{C}$

# **ELECTRICAL CHARACTERISTICS (Tc=25℃ unless otherwise specified)**

SYMBOL	PARAMETER	CONDITIONS			MIN	MAX	UNIT
I <sub>RRM</sub>	Repetitive peak reverse current	V <sub>R</sub> =V <sub>RRM</sub> Rated; Tj=125℃				3000	
I <sub>DRM</sub>	Repetitive peak off-state current	V <sub>D</sub> =V <sub>DRM</sub> Rated;	Tj=150℃			5000	μА
$V_{TM}$	On-state voltage	I <sub>T</sub> =45A				1.5	V
I <sub>GT</sub>	Gate-trigger current	$V_D = 6V; R_L = 6 \Omega; RG = 330 \Omega$ II  III			50		
				II		50	mA
					50		
$V_{GT}$	Gate-trigger voltage	V <sub>D</sub> =6V;R <sub>L</sub> =6 Ω ;RG=330 Ω				2.5	V
Rth (j-c)	Junction to case	Half cycle				4.0	°C/W



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