

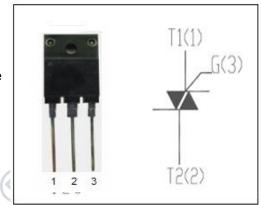
# isc Thyristors BCR40RM-12LB

## **DESCRIPTION**

- With TO-3PML packaging
- · High operating junction temperature
- Very high commutation performance maximized at each gate sensitivity
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## **APPLICATIONS**

- High temperature, high power motor control
- · Solid state relays; heating and cooking appliances
- · Switching applications



## ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	MIN	UNIT
$V_{DRM}$	Repetitive peak off-state voltage	600	V
$V_{RRM}$	Repetitive peak reverse voltage	600	V
I <sub>T(RMS)</sub>	RMS on-state current @Tc=118℃	40	Α
I <sub>TSM</sub>	Surge non-repetitive on-state current 50HZ	400	Α
$P_{G(AV)}$	Average gate power dissipation ( over any 20 ms period )	0.5	W
T <sub>j</sub>	Operating junction temperature	-40~150	$^{\circ}$
T <sub>stg</sub>	Storage temperature	-40~150	$^{\circ}$

## **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;	T: 405°0			40	
I <sub>DRM</sub>	Repetitive peak off-state current	V <sub>D</sub> =V <sub>DRM</sub> Rated; Tj=125℃				10	mA
$V_{TM}$	On-state voltage	I <sub>T</sub> =60A,t <sub>P</sub> =380 μ s				1.55	V
I <sub>GT</sub>	Gate-trigger current	$V_D$ =6V;R <sub>L</sub> =6 $\Omega$ ;R <sub>G</sub> =330 $\Omega$ $II$			50		
				II		50	mA
					50		
V <sub>GT</sub>	Gate-trigger voltage	$V_D$ =6V;R <sub>L</sub> =6 $\Omega$ ;R <sub>G</sub> =330 $\Omega$				2.5	V

isc Thyristors

BCR30AM-12LB



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