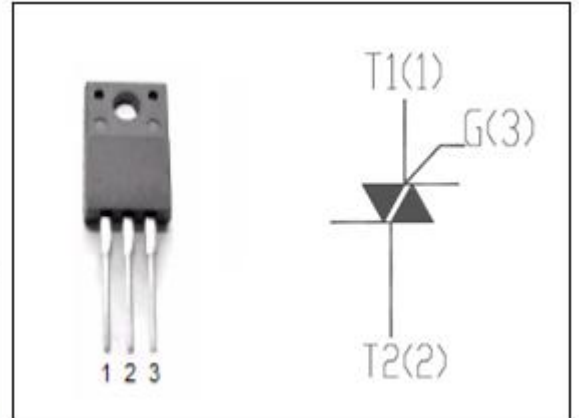


**isc Thyristors**
**BCR16FM-12LB**
**DESCRIPTION**

- 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<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	MAX	UNIT
V <sub>DRM</sub>	Repetitive peak off-state voltage	600	V
V <sub>RRM</sub>	Repetitive peak reverse voltage	600	V
I <sub>T(AV)</sub>	Average on-state current	16	A
		T <sub>c</sub> =98°C	
I <sub>TSM</sub>	Surge non-repetitive on-state current	160	A
		60HZ	
P <sub>G(AV)</sub>	Average gate power dissipation ( over any 20 ms period )	0.5	W
T <sub>j</sub>	Operating junction temperature	-40~150	°C
T <sub>stg</sub>	Storage temperature	-40~150	°C

**ELECTRICAL CHARACTERISTICS (T<sub>c</sub>=25°C 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; V <sub>D</sub> =V <sub>DRM</sub> Rated; T <sub>j</sub> =150°C		2.0	mA
I <sub>DRM</sub>	Repetitive peak off-state current				
V <sub>TM</sub>	On-state voltage	I <sub>T</sub> =25A		1.5	V
I <sub>GT</sub>	Gate-trigger current	V <sub>D</sub> =6V;R <sub>L</sub> =6 Ω ;R <sub>G</sub> =330 Ω	I	30	mA
			II	30	
			III	30	
V <sub>GT</sub>	Gate-trigger voltage	V <sub>D</sub> =6V;R <sub>L</sub> =6 Ω ;R <sub>G</sub> =330 Ω		1.5	V
R <sub>th(j-c)</sub>	Junction to case			2.9	°C/W