

# isc Thyristors

# BCR12CM-12LG

### DESCRIPTION

- With TO-220 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°C)

SYMBOL	PARAMETER	МАХ	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(RSM)</sub>	Average on-state current @Tc=123°C	12	А
I <sub>TSM</sub>	Surge non-repetitive on-state current 60HZ	120	А
P <sub>G(AV)</sub>	Average gate power dissipation ( over any 20 ms period )	0.5	W
Tj	Operating junction temperature	-40~150	°C
T <sub>stg</sub>	Storage temperature	-40~150	°C

#### ELECTRICAL CHARACTERISTICS (Tc=25°C unless otherwise specified)

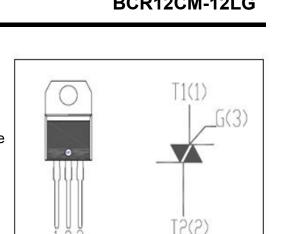
SYMBOL	PARAMETER	CONDITIONS			MIN	МАХ	UNIT
I <sub>RRM</sub>	Repetitive peak reverse current	V <sub>R</sub> =V <sub>RRM</sub> Rated;	Ti=150℃			2000	μ Α
I <sub>DRM</sub>	Repetitive peak off-state current	V <sub>D</sub> =V <sub>DRM</sub> Rated;					
V <sub>TM</sub>	On-state voltage	I <sub>T</sub> =20A				1.6	V
I <sub>GT</sub>	Gate-trigger current	I   V <sub>D</sub> =6V;R <sub>L</sub> =6 Ω;RG=330 Ω II   III III			30		
				II		30	mA
					30		
V <sub>GT</sub>	Gate-trigger voltage	V <sub>D</sub> =6V;R <sub>L</sub> =6 Ω;RG=330 Ω				1.5	V
Rth (j-c)	Junction to case	Half cycle				1.8	℃/W

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## BCR8PM-12LG

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