

## **INCHANGE Semiconductor**

# BCR8PM-12LG

### 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°C)

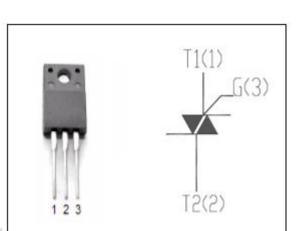
SYMBOL	PARAMETER	МАХ	UNIT
V <sub>DRM</sub>	Repetitive peak off-state voltage	600	V
V <sub>RRM</sub>	Repetitive peak reverse voltage	600	V
I <sub>T(RSM)</sub>	Average on-state current @Tc=107°C	8	А
I <sub>TSM</sub>	Surge non-repetitive on-state current 60HZ	80	А
$P_{G(AV)}$	Average gate power dissipation ( over any 20 ms period ) $@Tc=150^{\circ}C$	0.5	W
Tj	Operating junction temperature	-40~150	°C
T <sub>stg</sub>	Storage temperature	-40~150	°C

#### **ELECTRICAL CHARACTERISTICS (Tc=25**<sup>°</sup>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;			2000	μA	
I <sub>DRM</sub>	Repetitive peak off-state current	$V_D = V_{DRM}$ Rated; $T_j = 150\%$					
V <sub>TM</sub>	On-state voltage	I <sub>T</sub> =12A				1.6	V
I <sub>GT</sub>	Gate-trigger current	I				30	
		V <sub>D</sub> =6V;R <sub>L</sub> =6 Ω;RG=330 Ω II		II		30	mA
		III				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 <sub>(j-c)</sub>	Junction to case	Half cycle				4.3	°C/W

isc website: <u>www.iscsemi.com</u>

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