

# isc Thyristors

## INCHANGE SEMICONDUCTOR

BCR8PM-14LG

T1(1)

T2(2)

123

G(3)

### 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			UNIT
V <sub>DRM</sub>	Repetitive peak off-state voltage Tj=	Tj=150℃		V
V <sub>RRM</sub>	Repetitive peak reverse voltage			V
I <sub>T(AV)</sub>	Average on-state current			А
I <sub>TSM</sub>	Surge non-repetitive on-state current	60HZ	80	A
P <sub>G(AV)</sub>	Average gate power dissipation ( over any 20 ms period )			W
Tj	Operating junction temperature			°C
T <sub>stg</sub>	Storage temperature			°C



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SYMBOL	PARAMETER	CONDITIONS			MIN	МАХ	UNIT
I <sub>RRM</sub>	Repetitive peak reverse current	V <sub>R</sub> =V <sub>RRM</sub> Rated;				2.0	mA
I <sub>DRM</sub>	Repetitive peak off-state current	$V_D = V_{DRM}$ Rated; $T_j = 15$		C			
V <sub>TM</sub>	On-state voltage	I <sub>T</sub> =12A				1.6	V
I <sub>GT</sub>	Gate-trigger current	ν <sub>D</sub> =6V;R <sub>L</sub> =6 Ω ;R <sub>G</sub> =330 Ω		Ι		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> =3		1.5	V		
Rth (j-c)	Junction to case	Half cycle				4.3	℃ <b>/W</b>

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

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