

isc Thyristors

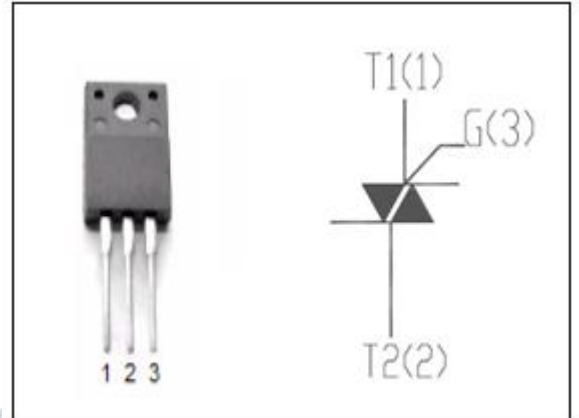
BCR12PM-14LG

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	800	V
V <sub>RRM</sub>	Repetitive peak reverse voltage	800	V
I <sub>T(RSM)</sub>	Average on-state current @T <sub>c</sub> =92°C	12	A
I <sub>TSM</sub>	Surge non-repetitive on-state current 60HZ	120	A
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		2000	μ A
I <sub>DRM</sub>	Repetitive peak off-state current				
V <sub>TM</sub>	On-state voltage	I <sub>T</sub> =20A		1.5	V
I <sub>GT</sub>	Gate-trigger current	V <sub>D</sub> =6V;R <sub>L</sub> =6 Ω ;RG=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 ;RG=330 Ω		1.5	V
R <sub>th(j-c)</sub>	Junction to case	Half cycle		4.0	°C/W

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