

## isc Thyristors

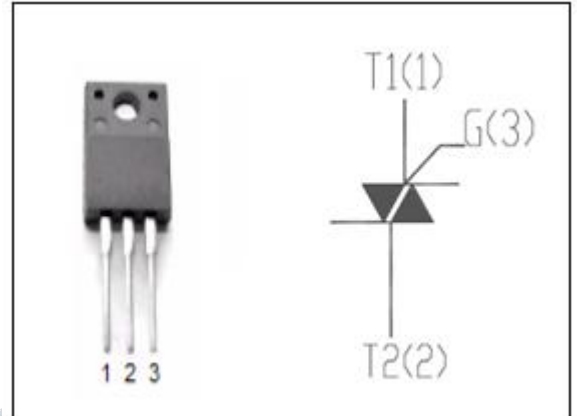
## BCR8LM-14LB

### 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 ( $T_a=25^{\circ}\text{C}$ )

SYMBOL	PARAMETER		MAX	UNIT
$V_{\text{DRM}}$	Repetitive peak off-state voltage		700	V
$V_{\text{RRM}}$	Repetitive peak reverse voltage		700	V
$I_{\text{T(RSM)}}$	Average on-state current	@ $T_c=86^{\circ}\text{C}$	8	A
$I_{\text{TSM}}$	Surge non-repetitive on-state current	60HZ	80	A
$P_{\text{G(AV)}}$	Average gate power dissipation ( over any 20 ms period )		0.5	W
$T_j$	Operating junction temperature		-40~150	$^{\circ}\text{C}$
$T_{\text{stg}}$	Storage temperature		-40~150	$^{\circ}\text{C}$

### ELECTRICAL CHARACTERISTICS ( $T_c=25^{\circ}\text{C}$ unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS		MIN	MAX	UNIT
$I_{\text{RRM}}$	Repetitive peak reverse current	$V_R=V_{\text{RRM}}$ Rated; $V_D=V_{\text{DRM}}$ Rated;	$T_j=150^{\circ}\text{C}$		2.0	mA
$I_{\text{DRM}}$	Repetitive peak off-state current					
$V_{\text{TM}}$	On-state voltage	$I_T=12\text{A}$			1.6	V
$I_{\text{GT}}$	Gate-trigger current	$V_D=6\text{V}; R_L=6\ \Omega; R_G=330\ \Omega$	I		30	mA
			II		30	
			III		30	
$V_{\text{GT}}$	Gate-trigger voltage	$V_D=6\text{V}; R_L=6\ \Omega; R_G=330\ \Omega$			1.5	V
$R_{\text{th (j-c)}}$	Junction to case	Half cycle			4.3	$^{\circ}\text{C}/\text{W}$

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