

# BR84



康比電子  
HORNBY ELECTRONIC

## SINGLE-PHASE SILICON BRIDGE RECTIFIER

**REVERSE VOLTAGE:** 400 VOLTS

**FORWARD CURRENT:** 8.0 AMPERE

### FEATURES

- Reliable low cost construction
- Ideal for printed circuit board
- Low forward voltage drop
- Low reverse leakage current
- High surge current capability

### MECHANICAL DATA

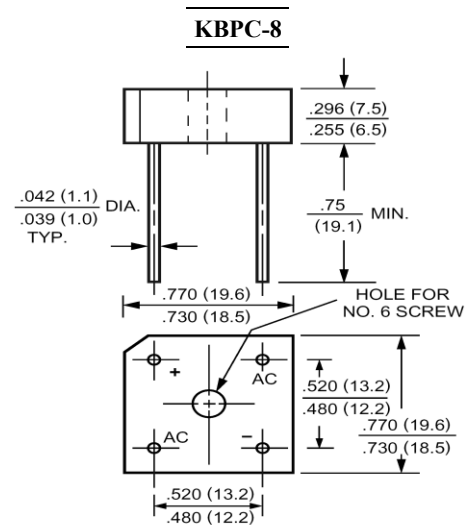
Case: Molded plastic, KBPC-8

Epoxy: UL 94V-O rate flame retardant

Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed

Mounting position: Any

Weight: 0.18ounce, 5.2gram



Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	Symbols				BR 84				Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$				400				Volts
Maximum RMS Voltage	$V_{RMS}$				280				Volts
Maximum DC Blocking Voltage	$V_{DC}$				400				Volts
Maximum Average Forward Rectified Current at $T_C=50$	$I_{(AV)}$				8.0				Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$				250				Amp
Maximum Forward Voltage Drop per Element at 4.0A DC and 25	$V_F$				1.0				Volts
Maximum Reverse Current at $T_A=25$	$I_R$				10.0				uAmp
at Rated DC Blocking Voltage $T_A=100$					500				
Typical Junction Capacitance (Note 1)	$C_J$				200				pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$				21				/W
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$				6				/W
Operating and Storage Temperature Range	$T_J, T_{stg}$				-55 to +125				

### NOTES:

1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2- Unit mounted on 8.6 x 8.6 x 0.24" thick (22 x 22 x 0.6cm) Al. Plate

3- Unit mounted on P.C.B. at 0.375" (9.5mm) lead length with 0.5 x 0.5" (12 x 12mm) copper pads

### RATINGS AND CHARACTERISTIC CURVES

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

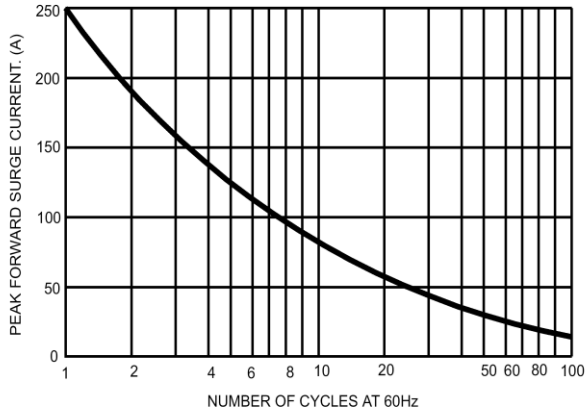


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

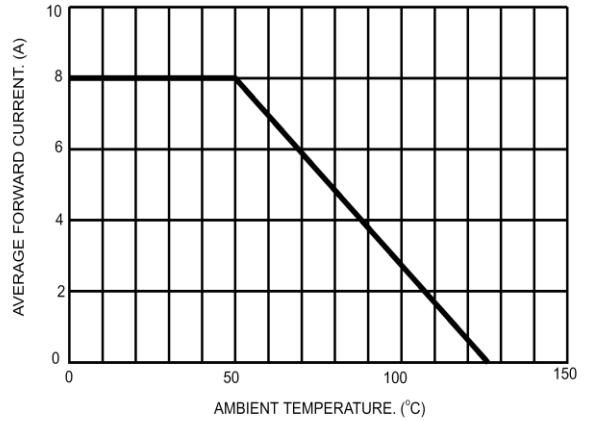


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

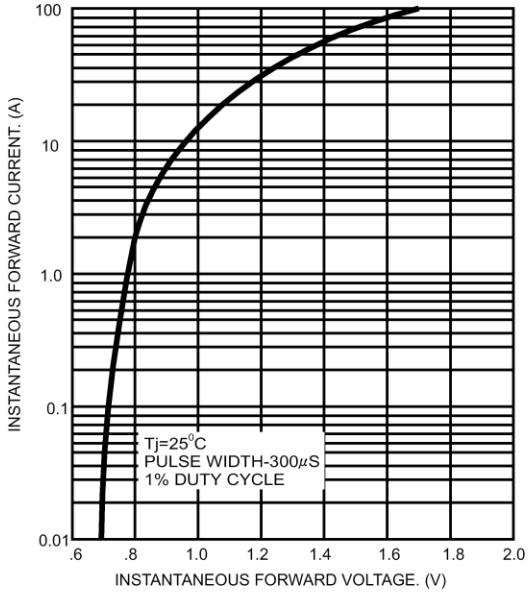


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

