

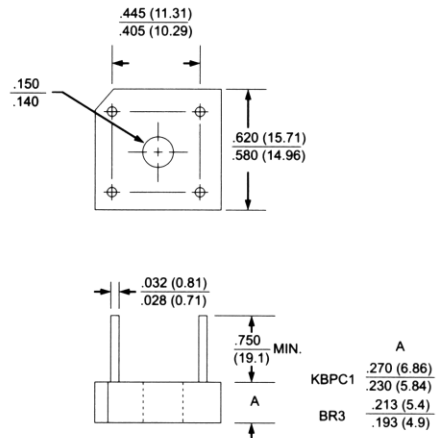


# KBPC1 / BR3 Series

Glass Passivated Single-Phase Bridge Rectifiers  
Voltage Range 50 to 1000 Volts Forward Current 3.0 Amperes

## Features

- ◆ Surge overload rating - 50 Amperes peak
- ◆ Low forward voltage drop
- ◆ Small size, simple installation
- ◆ Tinned copper leads
- ◆ Mounting Position: Any
- ◆ Mounting: Thru hole for #6 screw



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

Parameter	Symbols	BR305	BR31	BR32	BR34	BR36	BR38	BR310	Units	
		KBPC105	KBPC101	KBPC102	KBPC104	KBPC106	KBPC108	KBPC110		
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts	
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts	
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts	
Maximum average forward rectified output current at $T_C=50^\circ\text{C}$ (Note 1) $T_C=50^\circ\text{C}$ (Note 1) $T_A=50^\circ\text{C}$	$I_{F(AV)}$					3.0 2.0 2.0				Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$					50.0				Amps
Max. instantaneous forward voltage drop per element at 1.5A	$V_F$					1.1				Volts
Maximum DC reverse current at rated DC blocking voltage per element $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	$I_R$					10.0 1.0				$\mu\text{A}$ mA
Operating temperature range	$T_J$					-55 to +125				$^\circ\text{C}$
Storage temperature range	$T_{STG}$					-55 to +150				$^\circ\text{C}$

- Notes:**
1. Unit mounted on metal chassis
  2. Unit mounted on P.C. board

# RATINGS AND CHARACTERISTIC CURVES

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

FIG. 1 - MAXIMUM FORWARD SURGE CURRENT

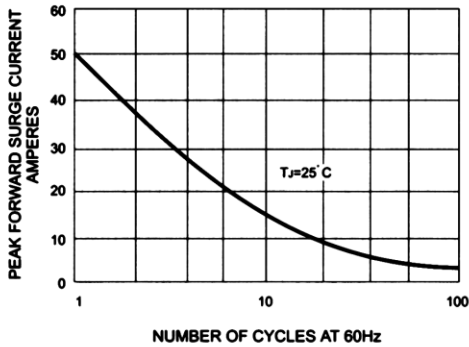


FIG. 2 - DERATING CURVE  
OUTPUT RECTIFIED CURRENT

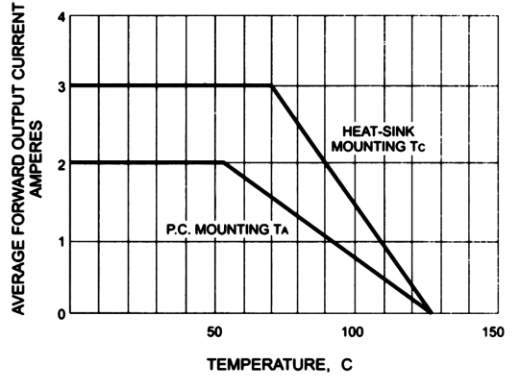


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS

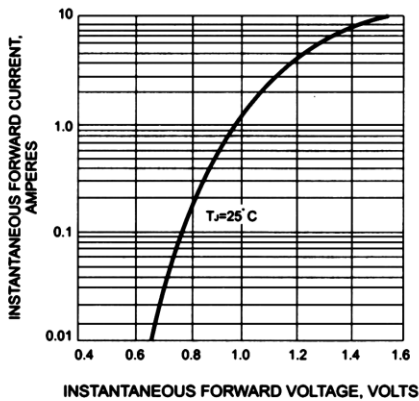


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

