SYNSEMI SEMICONDUCTOR

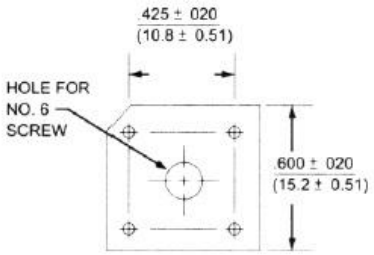
KBPC6 / BR6 Series

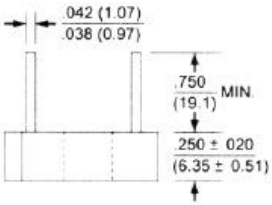
Glass Passivated Single-Phase Bridge Rectifiers
Voltage Range 50 to 1000 Volts Forward Current 6.0 Amperes

Features

- Surge overload rating - 125 Amperes peak
- Low forward voltage drop
- Small size, simple installation
- Sliver plasted copper leads
- Mounting Position: Any







Polarity shown on side of case;
positive lead by beveled corner.

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	BR605 KBPC605	BR61 KBPC601	BR62 KBPC602	BR64 KBPC604	BR66 KBPC606	BR68 KBPC608	BR610 KBPC610	Units
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=100°C (Note 1) / T_A=50°C (Note 2)	$I_{F(AV)}$	6.0 3.0							Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	125.0							Amps
Max. instantaneous forward voltage drop per element at 1.5A	V_F	1.0							Volt
Maximum DC reverse current at rated DC blocking voltage per element T_A=25°C / T_A=100°C	I_R	10.0 1.0							uA mA
Operating temperature range	T_J	-55 to +125							°C
Storage temperature range	T_{STG}	-55 to +150							°C

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

KBPC6 / BR6 Series

RATINGS AND CHARACTERISTIC CURVES

(T_A = 25°C unless otherwise noted)

FIG. 1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

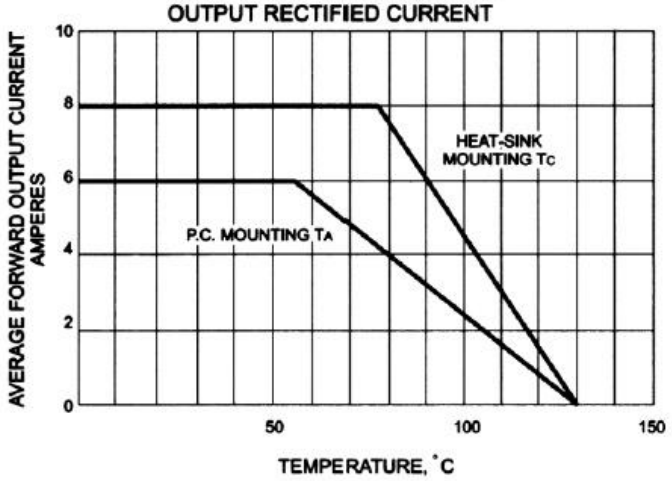


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

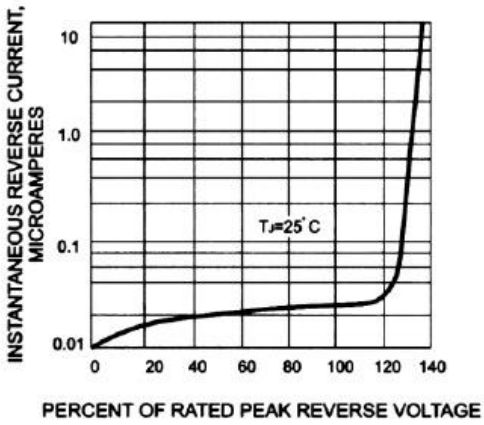


FIG. 3 - MAXIMUM FORWARD SURGE CURRENT

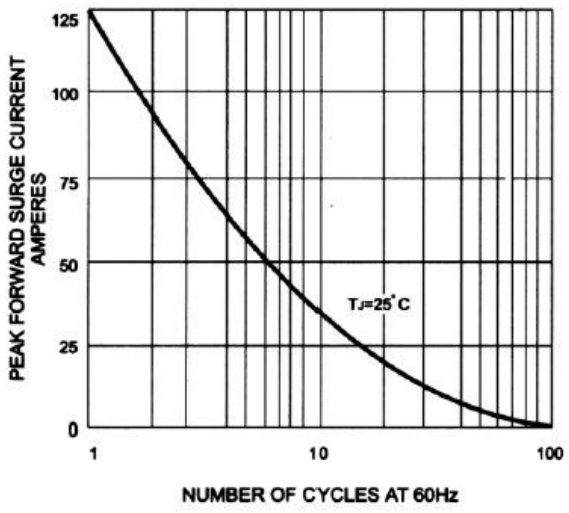


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

