



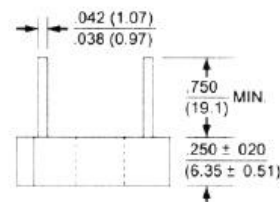
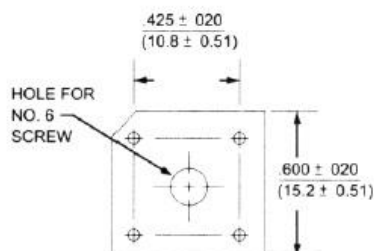
SYNSEMI SEMICONDUCTOR

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
- ◆ Silver plated 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	BR61	BR62	BR64	BR66	BR68	BR610	Units
		KBPC605	KBPC601	KBPC602	KBPC604	KBPC606	KBPC608	KBPC610	
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 $T_C=100^\circ\text{C}$ (Note 1) $T_A=50^\circ\text{C}$ (Note 2)	I_{FAV}	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 $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	I_R	10.0 1.0							μA 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

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RATINGS AND CHARACTERISTIC CURVES

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

FIG. 1 - DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

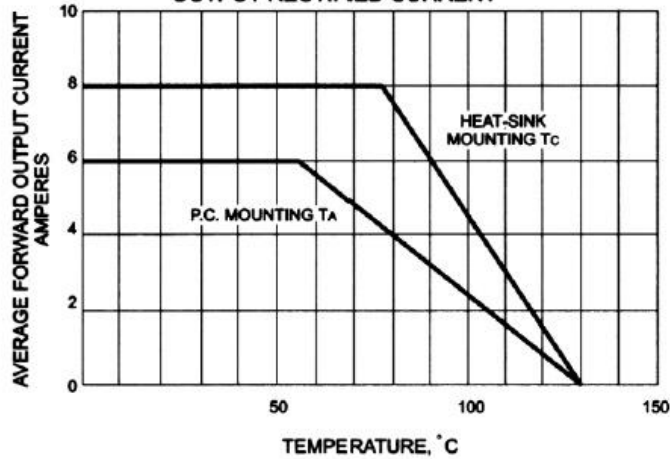


FIG. 2 - TYPICAL REVERSE
CHARACTERISTICS

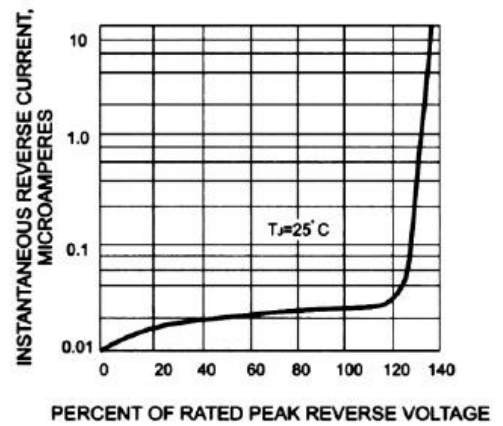


FIG. 3 - MAXIMUM FORWARD SURGE CURRENT

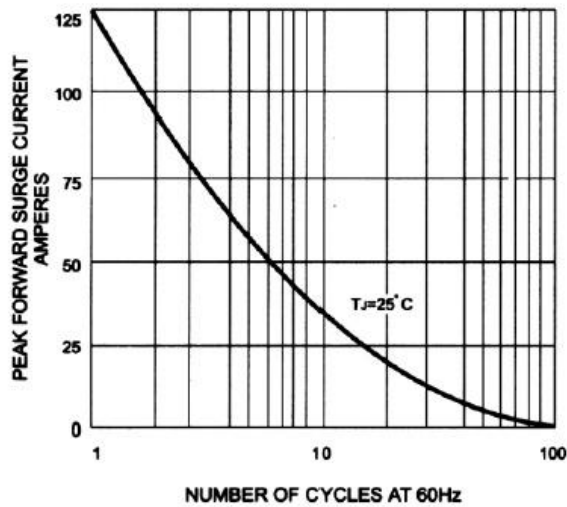


FIG. 4 - TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

