



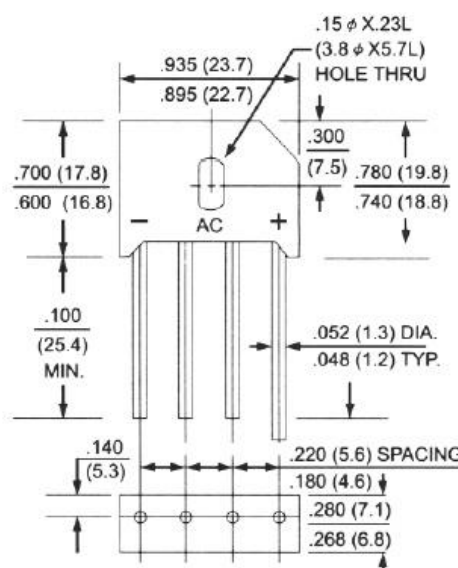
KBU / RS6 Series

SYNSEMI SEMICONDUCTOR

Glass Passivated Single-Phase Bridge Rectifiers
Voltage Range 50 to 1000 Volts Forward Current 4.0/6.0/8.0 Amperes

Features

- ◆ Surge overload rating - 200~300 Amperes peak
- ◆ Ideal for printed circuit boards
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Mounting Position: Any
- ◆ Mounting Torque: 5 In. lb. Max.



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%

Dimensions in inches and (millimeters)

Parameter	Symbols	KBU4A	KBU4B	KBU4D	KBU4G	KBU4J	KBU4K	KBU4M	Units
		KBU6A	KBU6B	KBU6D	KBU6G	KBU6J	KBU6K	KBU6M	
		KBU8A	KBU8B	KBU8D	KBU8G	KBU8J	KBU8K	KBU8M	
		RS601	RS602	RS603	RS604	RS605	RS606	RS607	
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 $T_C=100^{\circ}\text{C}$ at $T_A=30^{\circ}\text{C}/40^{\circ}\text{C}/45^{\circ}\text{C}$	I_{FAV}	KBU4X	4.0 4.0	KBU6X RS60X	6.0 6.0	KBU8X	8.0 6.0	/	Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}		200		250		300		Amps
Max. instantaneous forward voltage drop per element at 3.0A/3.0A/8.0A	V_F		1.0		2.0		1.0		Volts
Maximum DC reverse current at rated DC blocking voltage per element $T_A=25^{\circ}\text{C}$ $T_C=100^{\circ}\text{C}$	I_R		10 100		10 200		10 300		μA mA
Operating and storage temperature range	T_J, T_{STG}	-55 to +150							$^{\circ}\text{C}$

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RATINGS AND CHARACTERISTIC CURVES

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

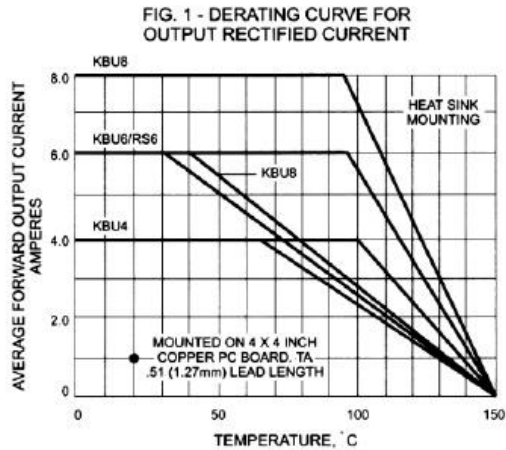


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

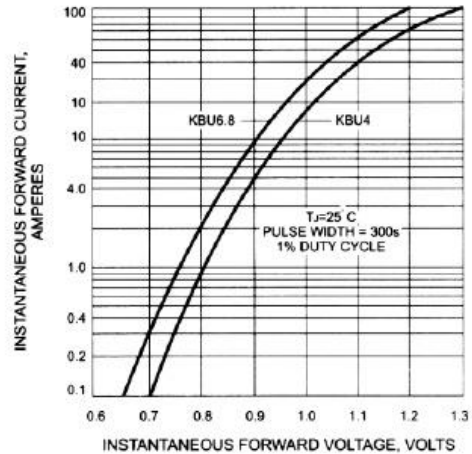


FIG. 3 - MAXIMUM NON-RETETITIVE PEAK FORWARD SURGE CURRENT

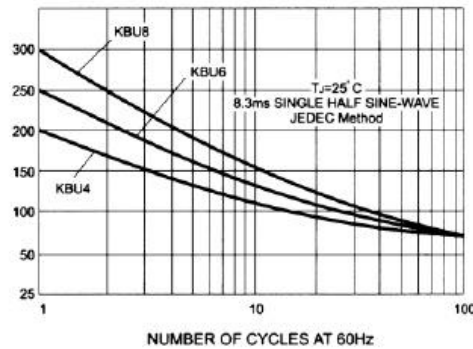


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

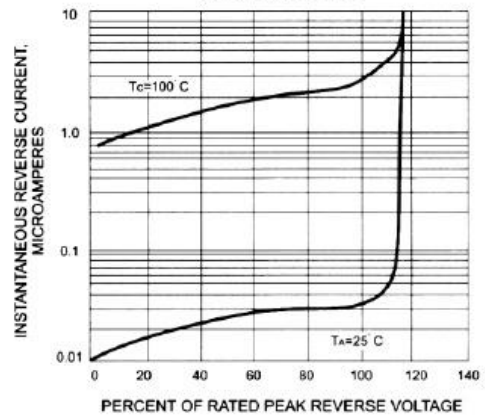


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER ELEMENT

