

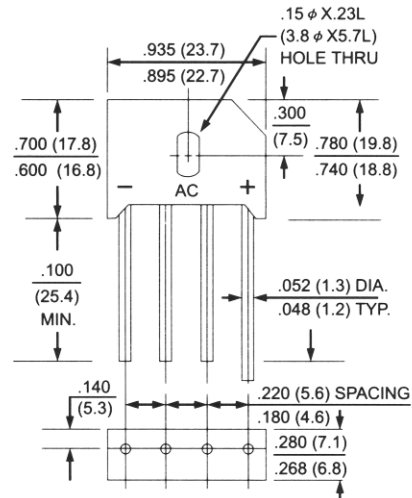


# KBU / RS6 Series

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.

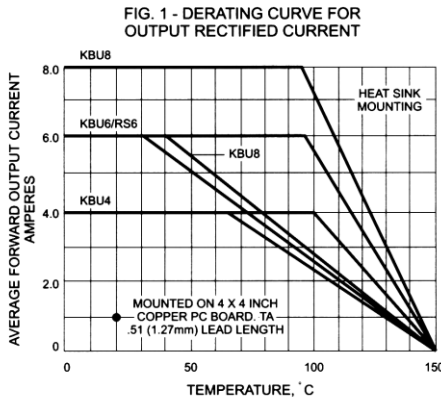
For capacitive load, derate current by 20%

Dimensions in inches and (millimeters)

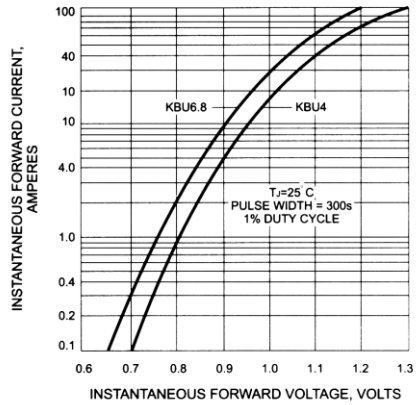
Parameter	Symbols	KBU4A	KBU4B	KBU4D	KBU4G	KBU4J	KBU4K	KBU4M	Units
		KBU6A	KBU6B	KBU6D	KBU6G	KBU6J	KBU6K	KBU6M	
		KBU8A	KBU8B	KBU8D	KBU8G	KBU8J	KBU8K	KBU8M	
		RS601	RS602	RS603	RS604	RS605	RS606	RS607	
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	$V_{RMS}$	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 $T_A=30^\circ\text{C}/40^\circ\text{C}/45^\circ\text{C}$	$I_{F(AV)}$		4.0 4.0		6.0 6.0		8.0 6.0		Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	KBU4X	200	KBU6X RS60X	250	KBU8X	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		$\mu\text{A}$ mA
Operating and storage temperature range	$T_J, T_{STG}$	-55 to +150							$^\circ\text{C}$

# RATINGS AND CHARACTERISTIC CURVES

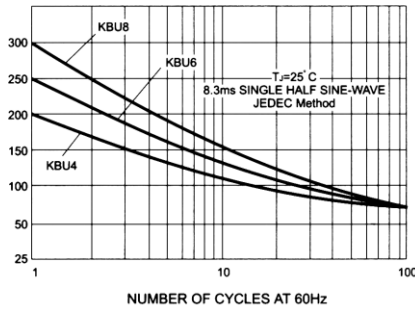
( $T_A = 25^\circ\text{C}$  unless otherwise noted)



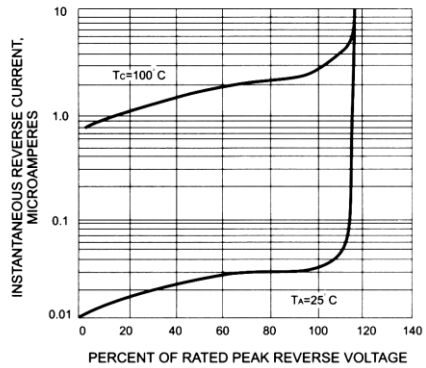
**FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC**



**FIG. 3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER ELEMENT**

