



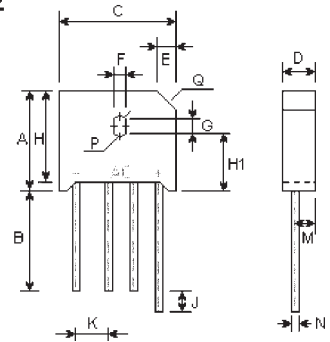
# KBU4,6,8/RS6 SERIES

**SINGLE-PHASE SILICON BRIDGE**  
**Reverse Voltage - 50 to 1000 Volts**  
**Forward Current - 4.0/6.0/8.0 Amperes**

## Features

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

**RS-6**



DIM	DIMENSIONS				Note
	inches		mm		
	Min.	Max.	Min.	Max.	
A	-	0.760	-	19.3	
B	1.0	-	25.4	-	
C	0.895	0.935	22.7	23.7	
D	0.260	0.280	6.6	7.1	
E	0.165	0.185	4.2	4.7	
F	0.140	0.160	3.6	4.1	
G	0.065	0.085	1.7	2.2	
H	0.660	0.700	16.8	17.8	
H1	0.405	0.455	10.3	11.3	
J	0.180	0.260	4.5	6.6	
K	0.180	0.220	4.6	5.6	
M	0.185	0.205	4.7	5.2	
N	0.048	0.052	1.2	1.3	∅
P	0.075 (1.9) R. Typ. (2 Places)				
Q	45°				

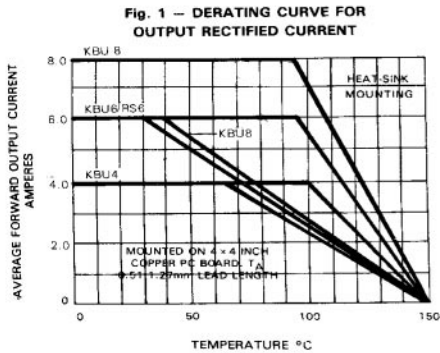
## Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.  
 For capacitive load, derate current by 20%.

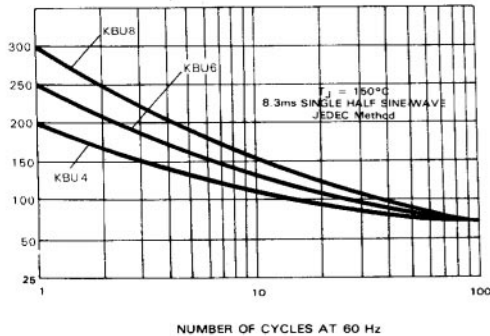
	Symbols	KBU4A KBU6A KBU8A RS601	KBU4B KBU6B KBU8B RS602	KBU4D KBU6D KBU8D RS603	KBU4G KBU6G KBU8G RS604	KBU4J KBU6J KBU8J RS605	KBU4K KBU6K KBU8K RS606	KBU4M KBU6M KBU8M RS607	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS bridge input voltage	$V_{RMS}$	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 $T_C=100^\circ\text{C}$ $T_A=65^\circ\text{C}/40^\circ\text{C}/45^\circ\text{C}$	$I_{(AV)}$	KBU4	4.0 4.0	KBU6 RS6	6.0 6.0	KBU8	8.0 6.0	/	Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (MIL-STD-750 method 4066)	$I_{FSM}$		200.0		250.0		300.0		Amps
Maximum instantaneous forward Voltage drop per element at 3.0A/3.0A/8.0A	$V_F$		1.0		1.0		1.0		Volt
Maximum DC reverse leakage at rated DC blocking voltage per element $T_A=25^\circ\text{C}$ $T_C=100^\circ\text{C}$	$I_R$		10.0 100.0		10.0 200.0		10.0 300.0		uA mA
Operating and storage temperature range	$T_J, T_{STG}$	-65 to +150							°C

# RATINGS AND CHARACTERISTIC CURVES

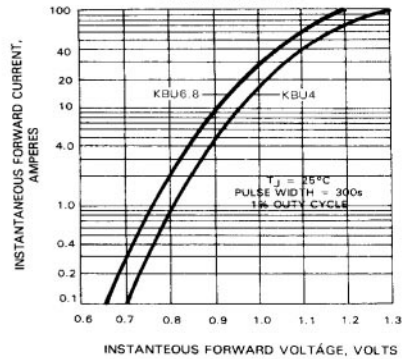
**RATING AND CHARACTERISTICS CURVES**  
KBU4, 6, 8/RS6 SERIES



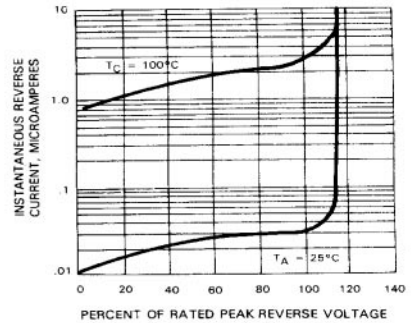
**Fig. 3 — MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**Fig. 2 — TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**Fig. 4 — TYPICAL REVERSE CHARACTERISTICS**



**Fig. 5 — TYPICAL JUNCTION CAPACITANCE PER ELEMENT**

