

RKBUS SERIES

8.0 AMPERE FAST RECOVERY SILICON SINGLE-PHASE BRIDGE RECTIFIER

GENERAL INSTRUMENT



FEATURES

- This series is UL recognized under component index, file number E54214
- Plastic material used carries Underwriters Laboratory Flammability Classification 94V-0
- High case dielectric strength
- Typical I_R less than $1 \mu A$
- High overload surge capability
- Fast switching for high efficiency
- Ideal for printed circuit board
- High temperature soldering guaranteed: $265^\circ C/10$ seconds/.375" (9.5mm) lead length/5 lbs., (2.3kg) tension

MECHANICAL DATA

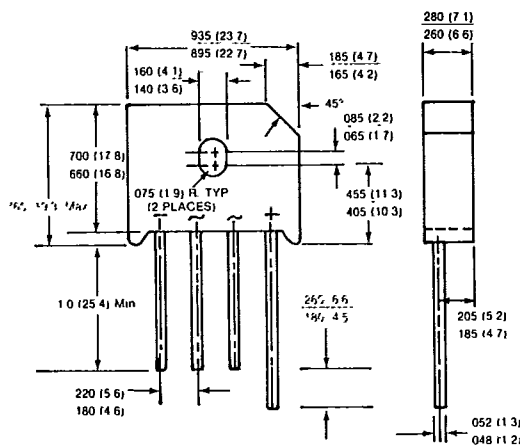
Case: Reliable low cost construction utilizing molded plastic technique
 Terminals: Leads solderable per MIL-STD-202, Method 208
 Mounting Position: Any
 Weight: 0.3 ounces, 8.0 grams
 Mounting Torque: 5 in. lb. max

VOLTAGE RANGE

50 to 600 volts

CURRENT

8.0 Amperes



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at $25^\circ C$ ambient temperature unless otherwise specified.
 Resistive or inductive load. For capacitive load, derate current by 20%

	KBU8A	KBU8B	KBU8D	KBU8G	KBU8J	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	V_{RRM}
Maximum RMS Input Voltage	35	70	140	280	420	V_{RMS}
Maximum DC Blocking Voltage	50	100	200	400	600	V_{OC}
Maximum Average Forward Rectified Output Current at Tc = 100° C TA=40° C				8.0 6.0	A _{AVI} A _{AVI}	
Peak Forward Surge Current, single sine-wave superimposed on rated load (JEDEC method)				300	A _{PK}	
Maximum Instantaneous Forward Voltage Drop per element at 8.0A				1.3	V _{PK}	
Maximum Reverse Leakage at rated DC Blocking Voltage per element TA = 25° C Tc = 100° C				10.0 500	μA μA	
Maximum Reverse Recovery Time (Note 1)	200			350		ns
Maximum Thermal Resistance RθJC (Note 2)				5.0	°C/W	
Storage and Operating Temperature Range Tc, Tstg				-65 to +150	°C	

NOTES:

1. Reverse Recovery Test Conditions: $I_F = .5A$, $I_R = 1A$, $I_{rr} = .25A$.
2. Thermal Resistance from Junction to Case for total bridge.

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RATING AND CHARACTERISTIC CURVES
RKB88 SERIES

FIG. 1 — DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

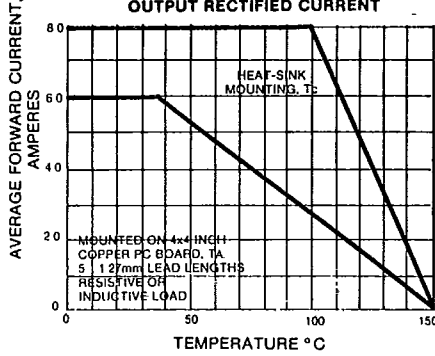


FIG. 2 — TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT

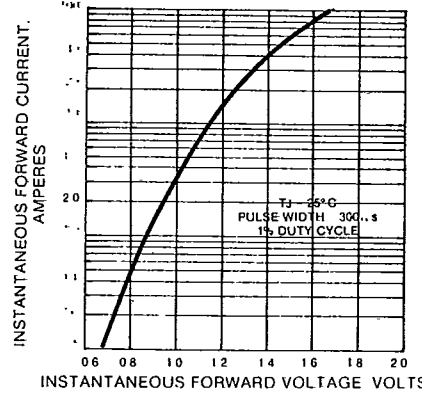


FIG. 3 — TYPICAL REVERSE CHARACTERISTICS

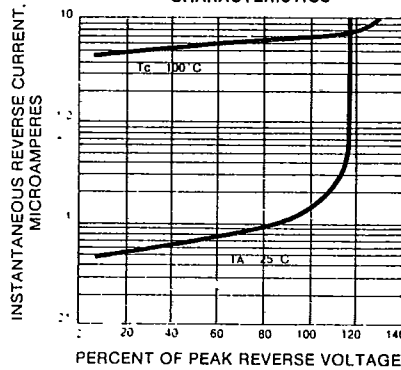


FIG. 4 — MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

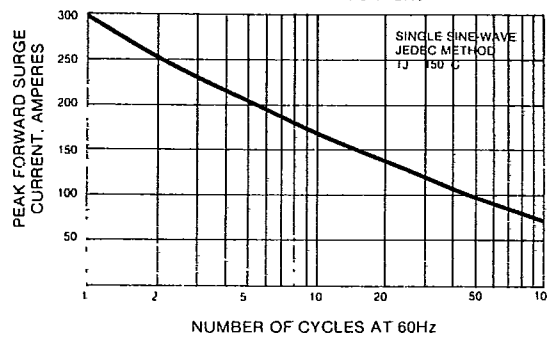


FIG. 5 — TYPICAL JUNCTION CAPACITANCE PER ELEMENT

