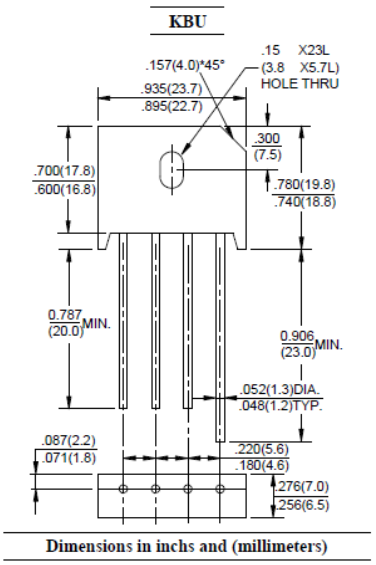
KBU8A THRU KBU8M

SINGLE PHASE SILICON BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 V
Forward Current - 8 A

Features

- High surge current capability
- Ideal for printed circuit board
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- Reliable low cost construction utilizing molded plastic technique



Dimensions in inchs and (millimeters)

Mechanical Data

- Case: Molded plastic, KBU
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Leads solderable per MIL-STD-202 method 208 guaranteed
- Mounting position: Any

Maximum Ratings and Electrical Characteristics

Ratings 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	KBU8A	KBU8B	KBU8D	KBU8G	KBU8J	KBU8K	KBU8M	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 0.375" (9.5 mm) Leaded Length at T_A = 65 °C	$I_{F(AV)}$	8							A
Peak Forward Surge Current, 8.3 ms Single Half-Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	200							A
Maximum Forward Voltage at 8 A	V_F	1.1							V
Maximum Reverse Current at Rated DC Blocking Voltage T_A = 25 °C T_A = 100 °C	I_R	10 500							μA
Typical Thermal Resistance [1]	$R_{\theta JA}$	18							°C/W
Typical Thermal Resistance [2]	$R_{\theta JC}$	3							°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	- 55 to + 125							°C

[1] Units mounted in free air, no heatsink, P.C.B at 0.375" (9.5 mm) lead length with 0.5 X 0.5" (12 X 12 mm) copper pads.
[2] Units mounted on a 3 X 3" X 0.11" thick (7.5 X 7.5 X 0.3 cm) Al. Plate heatsink.

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

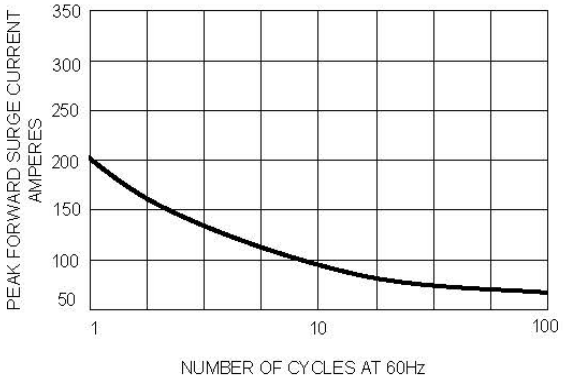


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

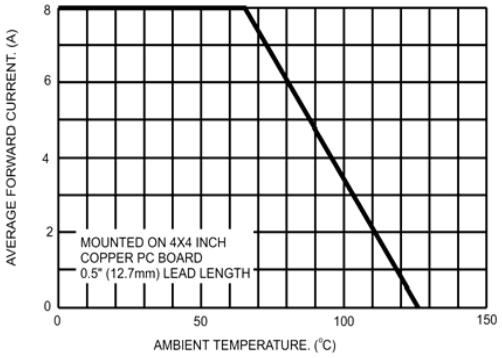


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

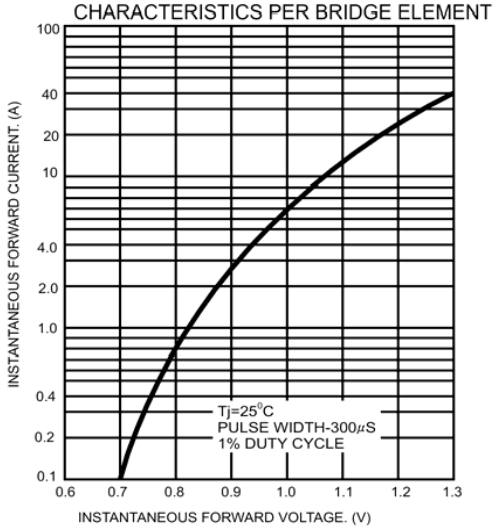


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT