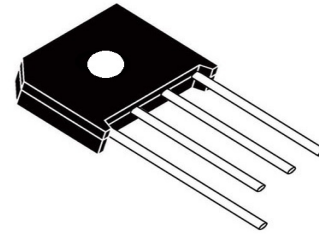
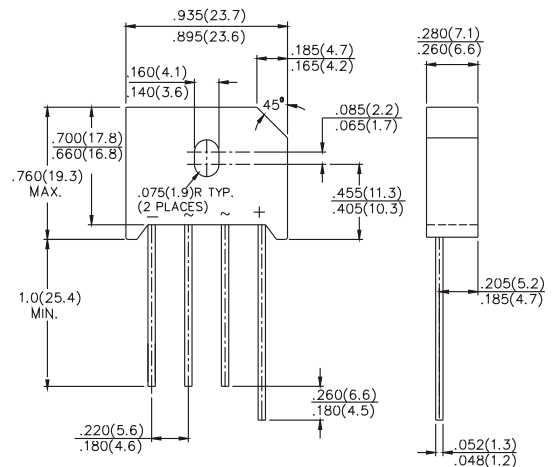


VOLTAGE RANGE: 50 - 1000V
CURRENT: 8.0 A



KBU



Dimensions in inches and (millimeters)

Features

- Ideal for printed circuit boards
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has Underwriters Laboratory
- Flammability Classification 94V-0

Mechanical Data

- Case : Molded plastic
- Polarity : Polarity symbols marked on case
- Mounting position : Any
- Weight : 8.0 grams



Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	KBU 8A	KBU 8B	KBU 8D	KBU 8G	KBU 8J	KBU 8K	KBU 8M	Unit
Maximum repetitive 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 output current at $T_C=100^\circ\text{C}$ (NOTE 1, 3) $T_A=45^\circ\text{C}$ (NOTE 2)	$I_{(AV)}$	8.0 6.0							A
Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) $T_J=150^\circ\text{C}$	I_{FSM}	300.0							A
Maximum instantaneous forward voltage drop per leg at 8.0A	V_F	1.0							V
Maximum DC reverse current at rated DC blocking voltage per leg $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	I_R	10.0 1.0							μA mA
Typical thermal resistance per leg (NOTE 2) (NOTE 3)	$R_{\theta JA}$ $R_{\theta JC}$	18.0 3.0							$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	T_J, T_{STG}	-50 to +150							$^\circ\text{C}$

NOTES:

- (1) Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw
- (2) Units mounted in free air, no heatsink, P.C.B. at 0.375" (9.5mm) lead length with 0.5 x 0.5" (12 x 12mm) copper pads
- (3) Units mounted on a 3.0 x 3.0" x 0.11" thick (7.5 x 7.5 x 0.3cm) Al. Plate heatsink



FIG. 1 - DERATING CURVE OUTPUT RECTIFIED CURRENT

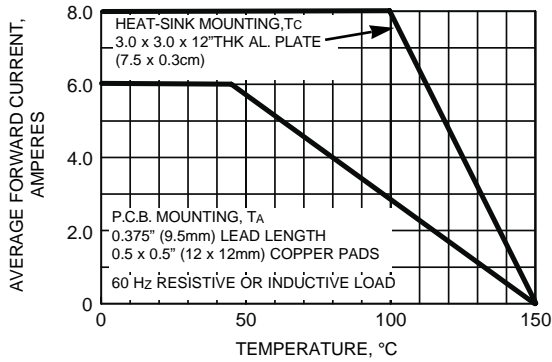


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

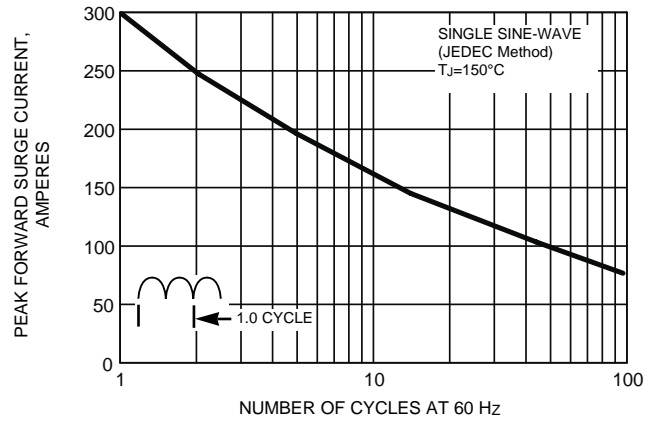


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

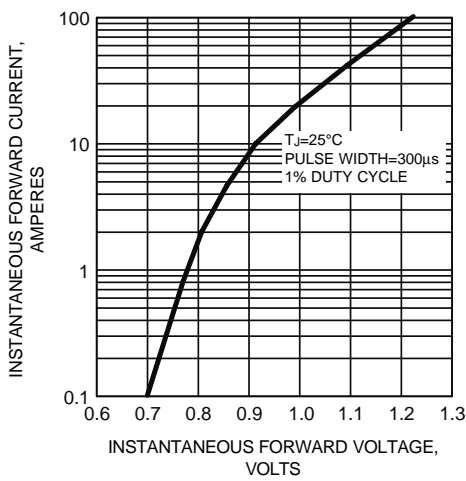


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

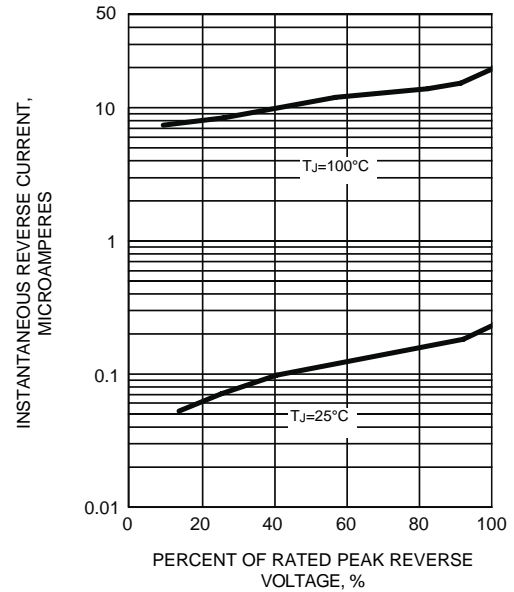


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

