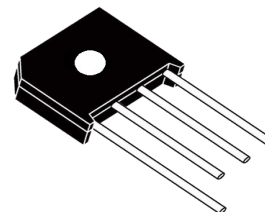


VOLTAGE RANGE: 50 - 1000V
CURRENT: 6.0 A

Features

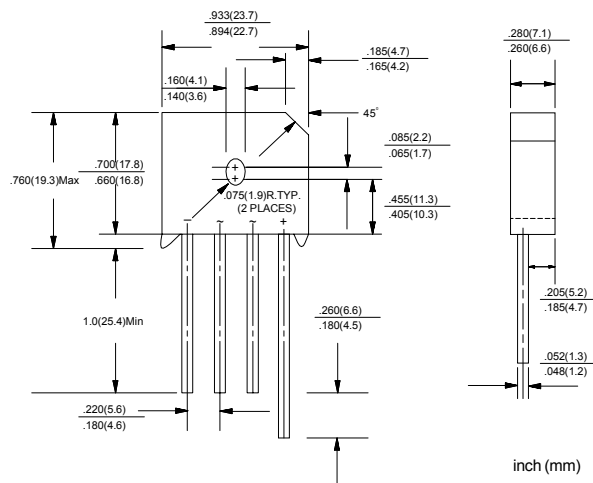
- Ideal for printed circuit boards
- High surge current capability
- High case dielectric strength of 1500 V_{RMS}



KBU

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 6A	KBU 6B	KBU 6D	KBU 6G	KBU 6J	KBU 6K	KBU 6M	Unit	
Maximum repetitive 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 at $T_C=100^\circ\text{C}$ (NOTE 1,2) $T_A=40^\circ\text{C}$ (NOTE 3)	I _(AV)	6.0						6.0		Amps
Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) $T_J=150^\circ\text{C}$	I _{FSM}	250.0								Amps
Maximum instantaneous forward voltage drop per leg at 6.0A	V _F	1.0								Volts
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	5.0						1.0		μA mA
Typical thermal resistance per leg (NOTE 2)	R _{θJA} R _{θJC}	8.6						3.1		$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	T _J , T _{STG}	-50 to +150								$^\circ\text{C}$

NOTES:

- (1) Recommended mounted position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw
- (2) Thermal resistance from junction to ambient with units in free air, P.C.B. mounted on 0.5 x 0.5" (12 x 12mm) copper pads, 0.375" (9.5mm) lead length
- (3) Thermal resistance from junction to case with units mounted on a 2.6 x 1.4 x 0.06" thick (6.5 x 3.5 x .15cm) Al. Plate



FIG. 1 - DERATING CURVE OUTPUT RECTIFIED CURRENT

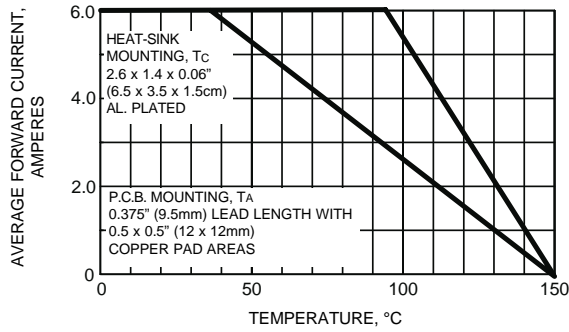


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

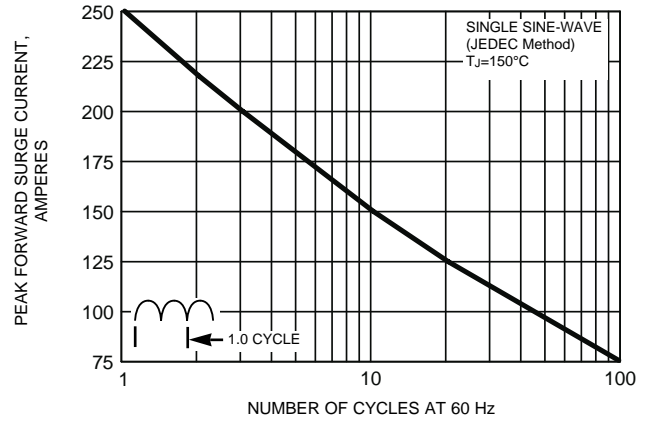


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

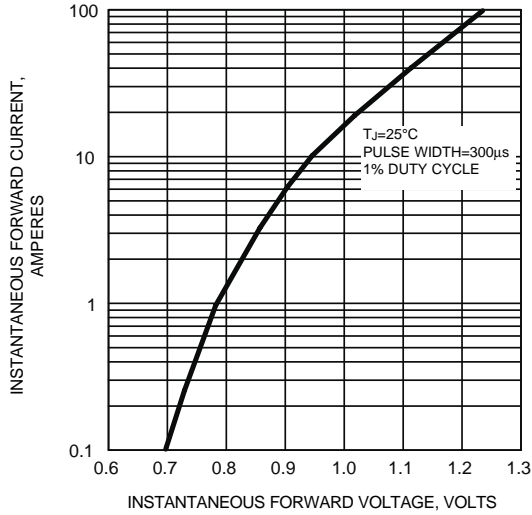


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

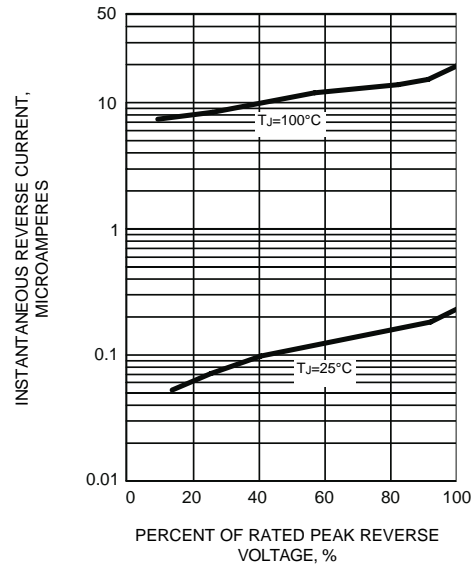


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

