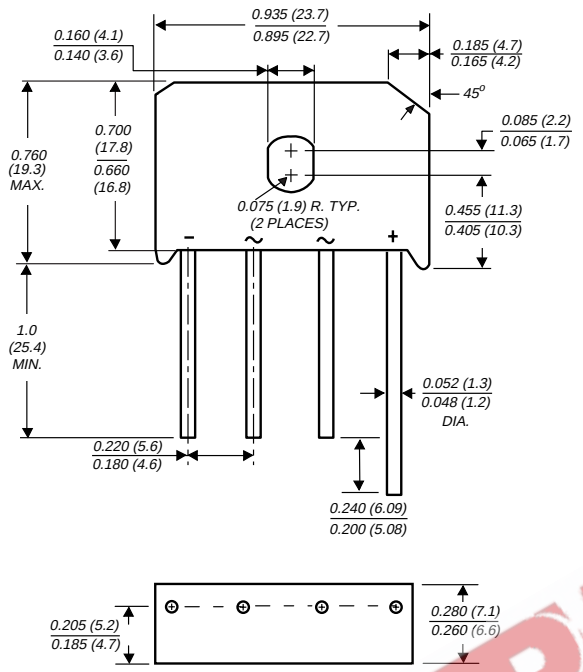
KBU4A THRU KBU4M

SINGLE-PHASE BRIDGE RECTIFIER

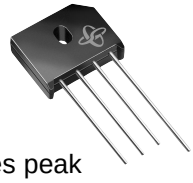
***Reverse Voltage** - 50 to 1000 Volts* ***Forward Current** - 4.0 Amperes*

Case Style KBU



Dimensions in inches and (millimeters)

FEATURES



- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- This series is UL listed under Recognized under Component Index, file number E54214
- High case dielectric strength of 1500 V_{RMS}
- Ideal for printed circuit boards
- Surge overload rating of 200 Amperes peak
- Typical I_R less than 0.1µA
- High temperature soldering guaranteed: 250°C/10 seconds, 0.375" (9.5mm) lead length, 5lbs (2.3kg) tension

MECHANICAL DATA

Case: Molded plastic body
Terminals: Plated lead solderable per MIL-STD-750, Method 2026
Mounting Position: Any (NOTE 3)
Mounting Torque: 5 in. - lb. max.
Weight: 0.3 ounce, 8.0 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	KBU 4A	KBU 4B	KBU 4D	KBU 4G	KBU 4J	KBU 4K	KBU 4M	UNITS
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°C (NOTE 1) T_A=30°C (NOTE 2)	$I_{(AV)}$	4.0 4.0							Amps
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200.0							Amps
Maximum instantaneous forward voltage drop per leg at 4.0A	V_F	1.0							Volts
Maximum DC reverse current at rated DC blocking voltage per leg T_A=25°C T_A=125°C	I_R	5.0 1.0							µA mA
Typical thermal resistance per leg (NOTE 2) (NOTE 1)	$R_{\Theta JA}$ $R_{\Theta JL}$	19.0 4.0							°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-50 to +150							°C

NOTES:
(1) Units mounted on a 2.0 x 1.6 x 0.3" thick (5 x 4 x 0.8cm.) Al. Plate
(2) Units mounted on P.C.B. with 0.5 x 0.5" (12 x 12mm) copper pads and 0.375" (9.5mm) lead length
(3) Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw

RATINGS AND CHARACTERISTICS CURVES KBU4A THRU KBU4M

FIG. 1 - DERATING CURVE OUTPUT RECTIFIED CURRENT

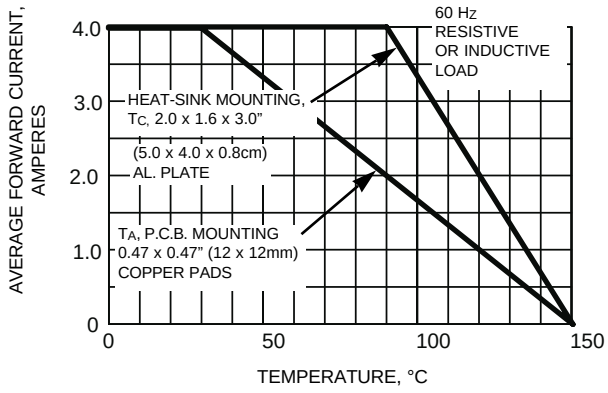


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

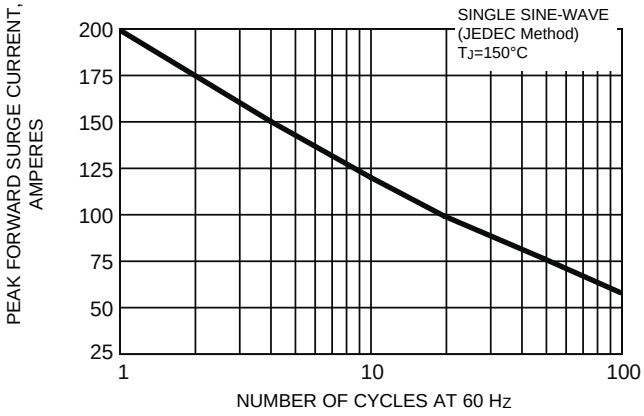


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

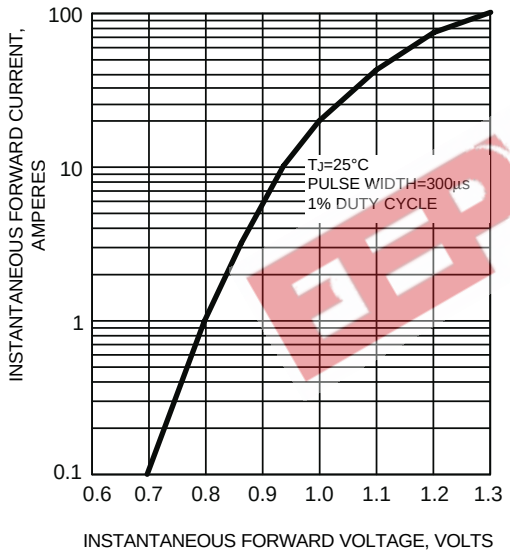


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

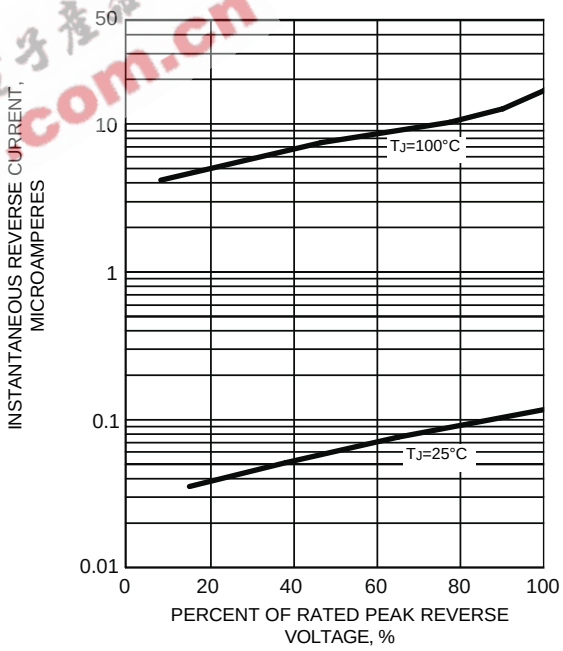


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG