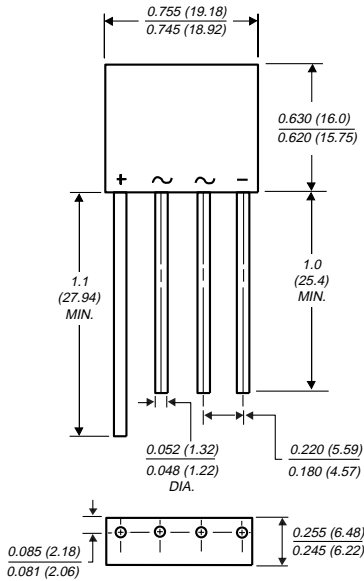


KBL005 THRU KBL10

SINGLE-PHASE BRIDGE RECTIFIER

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

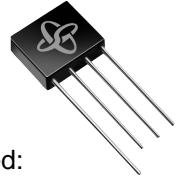
Case Style KBL



Dimensions in inches and (millimeters)

FEATURES

- ◆ Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- ◆ This series is UL listed under the Recognized Component Index, file number E54214
- ◆ High case dielectric strength of 1500 VRMS
- ◆ Ideal for printed circuit boards
- ◆ High forward surge current capability
- ◆ High surge current capability
- ◆ 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 leads solderable per MIL-STD-750, Method 2026

Mounting Position: Any

Weight: 0.2 ounce, 5.6 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	KBL 005	KBL 01	KBL 02	KBL 04	KBL 06	KBL 08	KBL 10	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 output current at T _A =50°C	I _(AV)	4.0							Amps
Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) T _J =150°C	I _{FSM}	200.0							Amps
Maximum instantaneous forward voltage drop per leg at 4.0A	V _F	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage per leg	I _R	5.0 1.0							μA mA
Typical thermal resistance per leg (NOTE 1) (NOTE 2)	R _{θJA} R _{θJL}	19.0 2.4							°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-50 to +150							°C

NOTES:

(1) Thermal resistance from junction to ambient with units mounted on 3.0 x 3.0 x 0.11" thick (7.5 x 7.5 x 0.3cm) Al. plate

(2) Thermal resistance from junction to lead with units mounted on P.C.B. at 0.375" (9.5mm) lead length and 0.5 x 0.5" (12 x 12mm) copper pads

RATINGS AND CHARACTERISTICS CURVES KBL005 THRU KBL10

FIG. 1 - DERATING CURVE OUTPUT RECTIFIED CURRENT

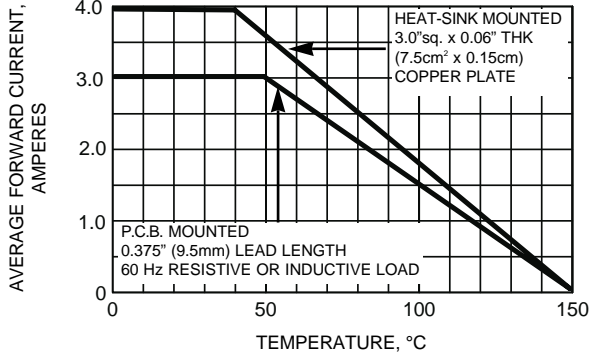


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

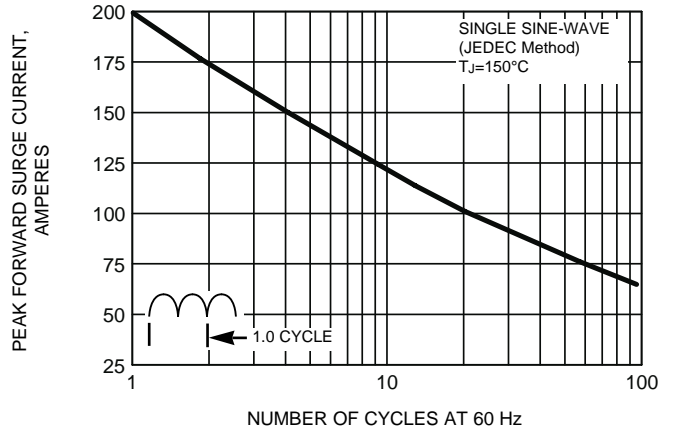


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

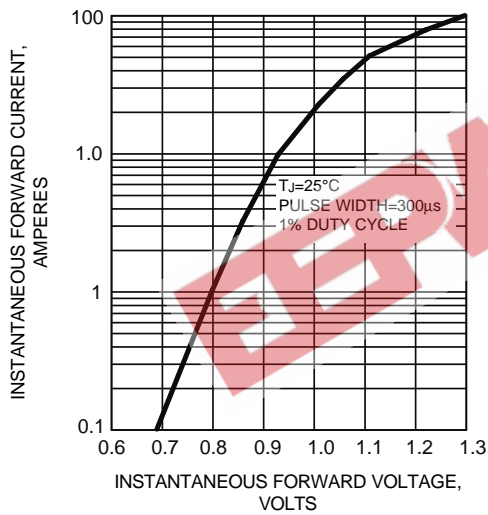


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

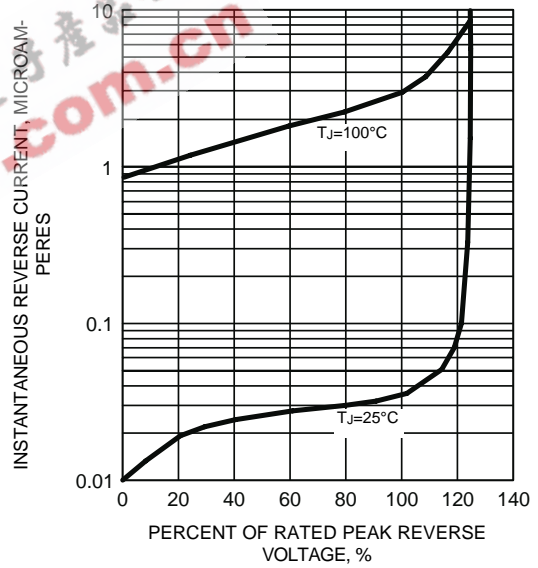


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

