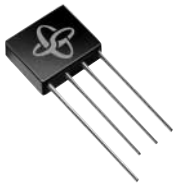


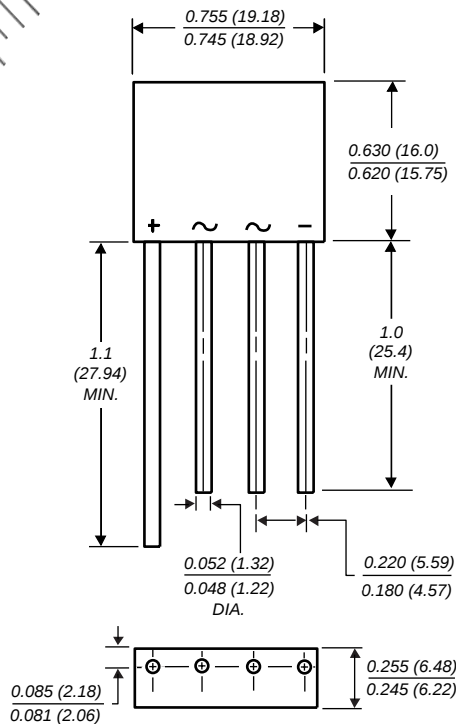
Single-Phase Bridge Rectifier

Reverse Voltage 50 and 1000 V

Forward Current 4.0 A



Case Style KBL



Dimensions in inches and (millimeters)

Features

- Plastic package 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 V_{RMS}
- Ideal for printed circuit boards
- High forward surge current capability
- High surge current capability
- High temperature soldering guaranteed: 260°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 & Thermal 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	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward output current at TA=50°C	IF(AV)	4.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method) TJ=150°C	IFSM	200							A
Typical thermal resistance per leg (NOTE 1)	RθJA	19							°C/W
(NOTE 2)	RθJL	2.4							
Operating junction storage and temperature range	TJ, TSTG	-50 to +150							°C

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 instantaneous forward drop per leg at 4.0 A	V _F	1.1							V
Maximum DC reverse current at rated T _A = 25°C	I _R	5.0							μA
DC blocking voltage per leg T _A =125°C		1.0							mA

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 Characteristic Curves (T_A = 25°C unless otherwise noted)

FIG. 1 - DERATING CURVE OUTPUT RECTIFIED CURRENT

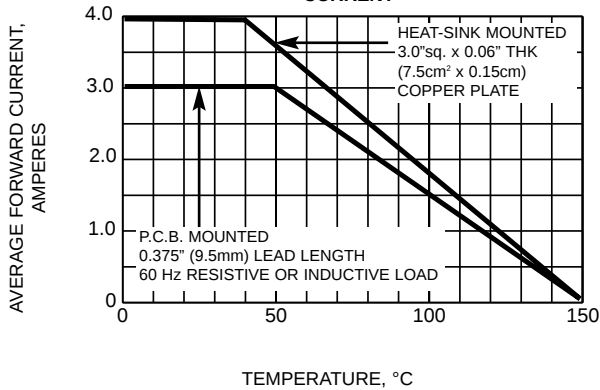


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

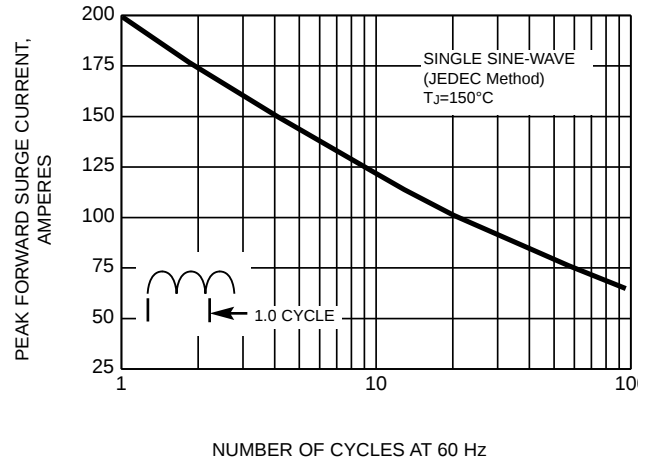


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

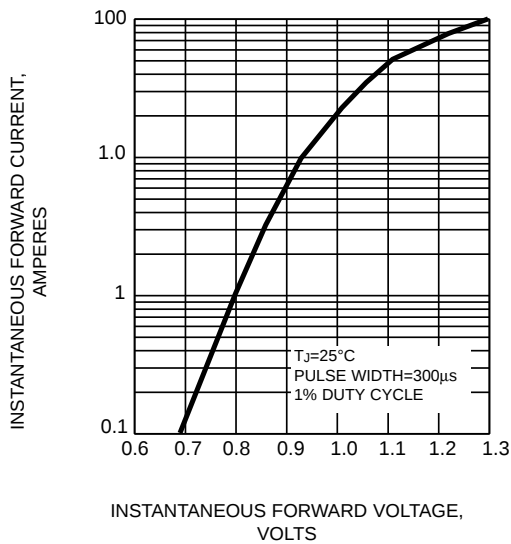


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

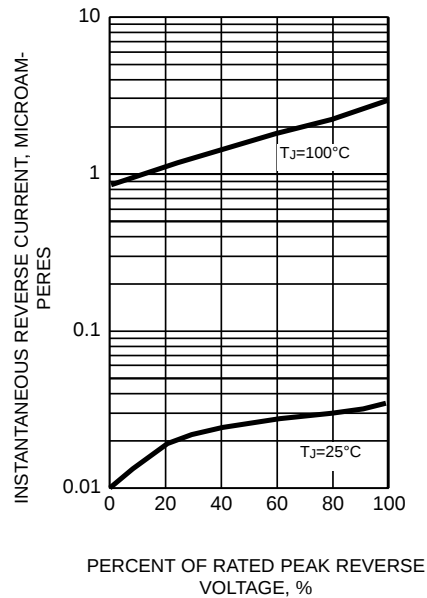


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

