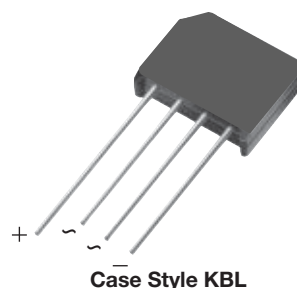


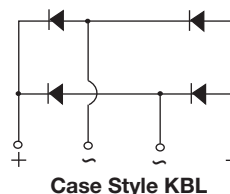
Features

- Ideal for printed circuit board mounting
- This series is UL listed under the Recognized Component Index, file number E142814
- High temperature soldering:
260°C/10 seconds at terminals
- High case dielectric strength
- Component in accordance to
RoHS 2011/65/EU and WEEE 2002/96/EC



Mechanical Data

- **Case:**KBL
Epoxy meets UL 94 V-0 flammability rating
- **Terminals:**Plated leads, solderable per
MIL-STD-750, Method 2026
- **Mounting Position:** Any



Maximum Ratings & Thermal Characteristics

TA = 25 °C unless otherwise specified, Rdsistive or Inductive load, 60HZ.

For Capacitive load derate current by 20%

Parameter	Symbol	KBL 6005	KBL 601	KBL 602	KBL 604	KBL 606	KBL 608	KBL 610	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS bridge input 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 $T_L = 100^\circ\text{C}$	$I_{F(AV)}$	6.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150							A
Typical thermal resistance	$R_{\theta JL}^{(1)}$	4.0							°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							°C

Note: 1. Thermal resistance from junction to lead with units mounted on PCB at 0.375" (9.5 mm) lead length and 0.5" x 0.5" (12 mm x 12 mm) copper pads

Electrical Characteristics

TA = 25 °C unless otherwise specified, Rdsistive or Inductive load, 60HZ.

For Capacitive load derate current by 20%

Parameter		Symbol	KBL 6005	KBL 601	KBL 602	KBL 604	KBL 606	KBL 608	KBL 610	Unit
Maximum instantaneous forward voltage drop per leg at 3.0A		V _F	1.1							V
Maximum DC reverse current at rated DC blocking voltage per element	T _A =25℃	I _R	5							μA
	T _A =125℃		500							

Characteristic Curves ($T_A=25\text{ }^{\circ}\text{C}$ unless otherwise noted)

Figure 1. Derating Curves Output Rectified Current

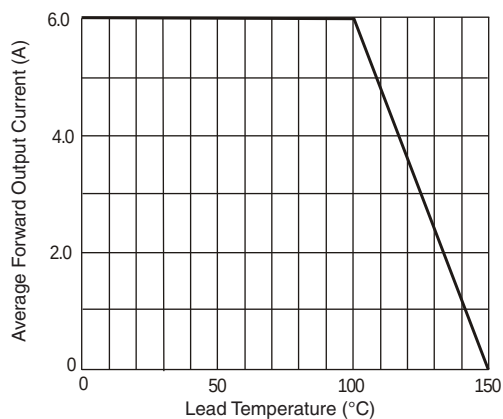


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

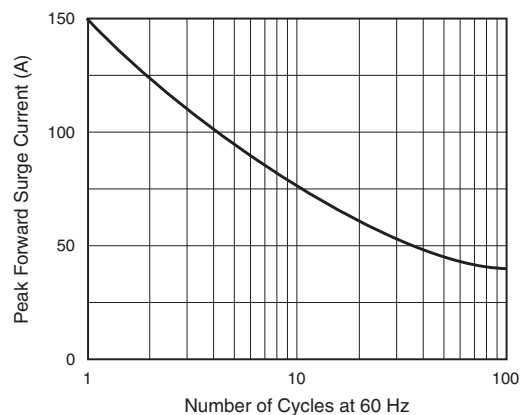


Figure 3. Typical Forward Voltage Characteristics Per Diode

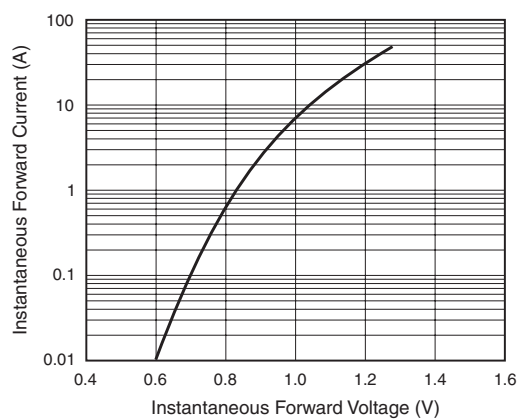
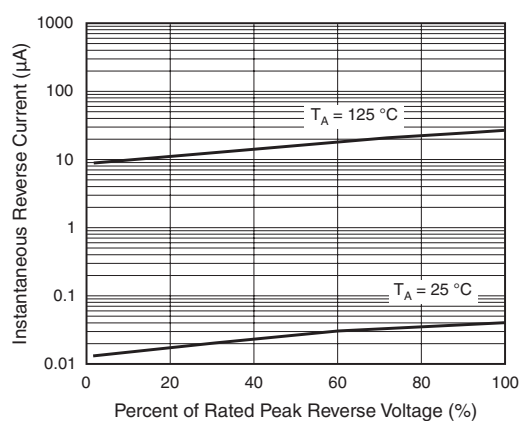
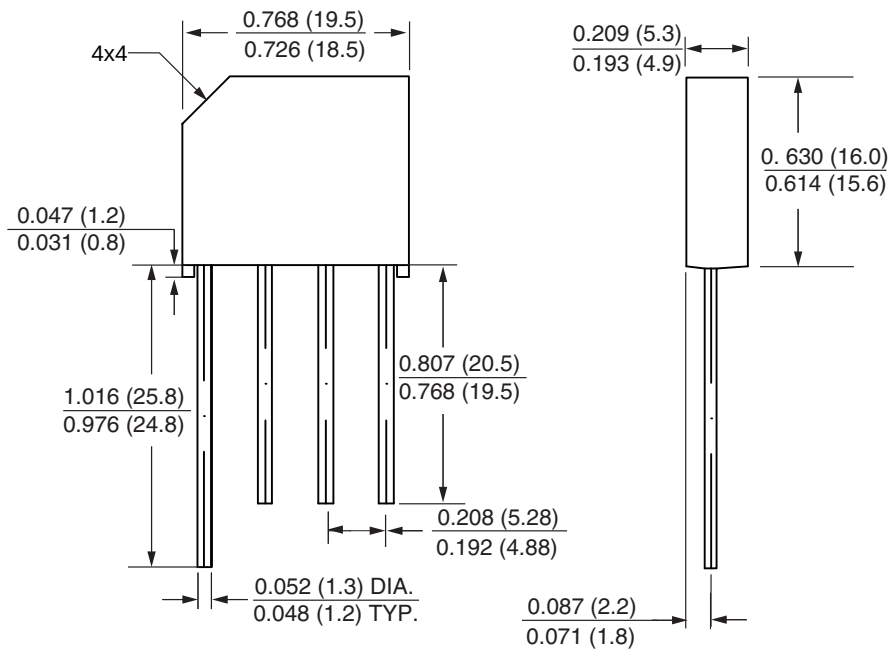


Figure 4. Typical Reverse Characteristics Per Diode



Package Outline**KBL**

Dimensions in inches (millimeters)

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