KBL005 THRU KBL10

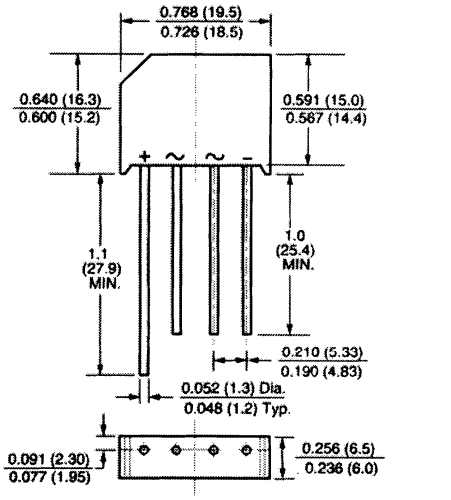
SINGLE-PHASE SILICON BRIDGE RECTIFIERS
Reverse Voltage - 50 to 1000 V
Forward Current - 4 A

Features

- High surge current capability

Mechanical Data

- Case: KBL
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Silver plated(E4 Suffix) leads, solderable per J-STD-002B and JESD22-B102D
- Polarity: As marked on body



Package outline dimensions in inches (millimeters)

Absolute Maximum Ratings and Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	KBL005	KBL01	KBL02	KBL04	KBL06	KBL08	KBL10	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS 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 Current at T_A = 50 °C	$I_{F(AV)}$	4							A
Peak Forward Surge Current, 8.3 ms Single Half-Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	200							A
Maximum Forward Voltage Drop at 2 A	V_F	1.1							V
Maximum Reverse Current T_A = 25 °C at Rated DC Blocking Voltage T_A = 125 °C	I_R	5 1							µA mA
Operating and Storage Temperature Range	T_J, T_{stg}	- 55 to + 150							°C

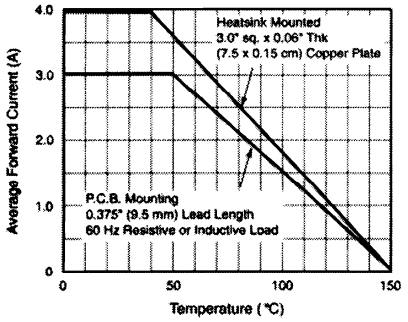


Figure 1. Derating Curve Output Rectified Current

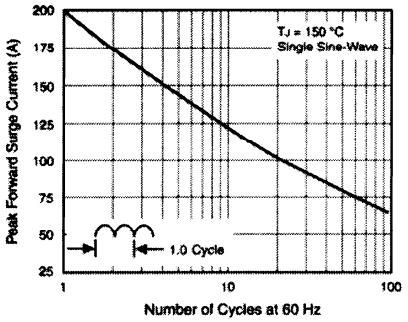


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

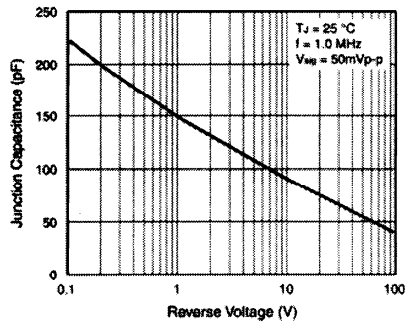


Figure 5. Typical Junction Capacitance Per Leg

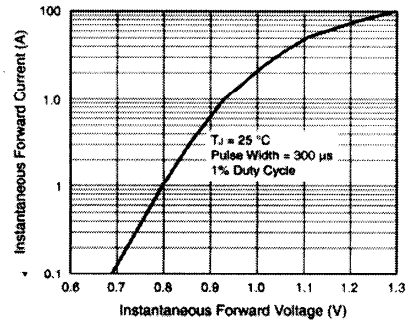


Figure 3. Typical Instantaneous Forward Characteristics Per Leg

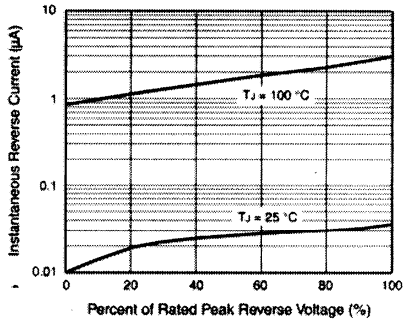


Figure 4. Typical Reverse Leakage Characteristics Per Leg