

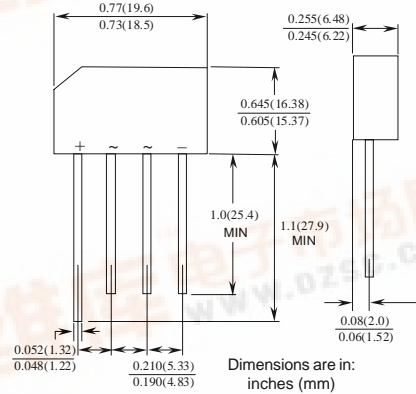


Discrete POWER & Signal Technologies

KBL005 - KBL10

Features

- Ideal for printed circuit board .
- Reliable low cost construction.
- High surge current capability.



4.0 Ampere Silicon Bridge Rectifiers

Absolute Maximum Ratings*

T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
I _O	Average Rectified Current @ T _A = 40°C	4.0	A
i _{f(surge)}	Peak Forward Surge Current 8.3 ms single half-sine-wave Superimposed on rated load (JEDEC method)	200	A
P _D	Total Device Dissipation Derate above 25°C	6.58 53	W mW/°C
R _{θJA}	Thermal Resistance, Junction to Ambient,** per leg	19	°C/W
R _{θJL}	Thermal Resistance, Junction to Lead,** per leg	2.4	°C/W
T _{stg}	Storage Temperature Range	-55 to +150	°C
T _J	Operating Junction Temperature	-55 to +150	°C

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

** Device mounted on PCB with 0.375" (9.5 mm) lead length and 0.5 x 0.5" (13 x 13 mm) copper pads.

Electrical Characteristics

T_A = 25°C unless otherwise noted

Parameter	Device							Units
	005	01	02	04	06	08	10	
Peak Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
DC Reverse Voltage (Rated V _R)	50	100	200	400	600	800	1000	V
Maximum Reverse Leakage, total bridge @ rated V _R	5.0 500							μA
T _A = 25°C								μA
T _A = 100°C								μA
Maximum Forward Voltage Drop, per bridge @ 4.0 A	1.1							V



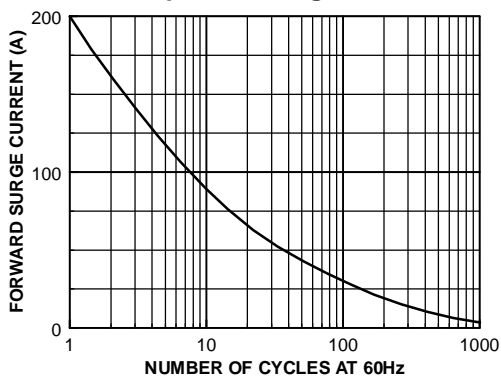
Silicon Bridge Rectifiers

(continued)

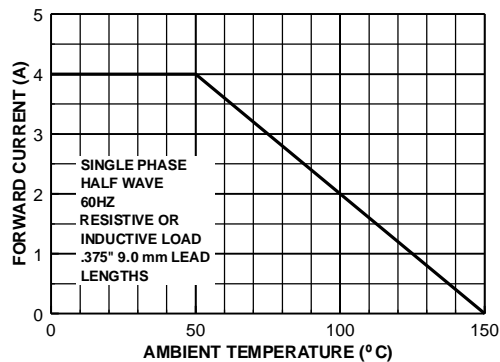
KBL005 - KBL10

Typical Characteristics

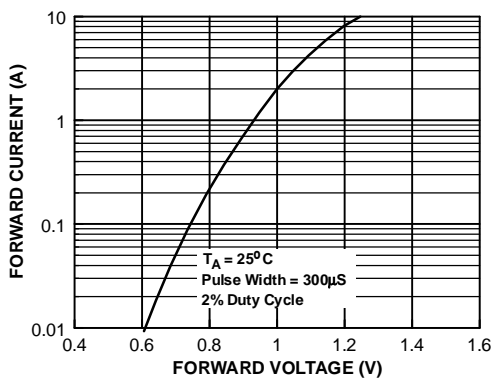
Non-Repetitive Surge Current



Forward Current Derating Curve



Forward Characteristics



Reverse Characteristics

