

KBL005 - KBL10

Features

- Ideal for printed circuit board .
- Reliable low cost construction.
- High surge current capability.
- UL certified, UL #E96005.



Bridge Rectifiers

Absolute Maximum Ratings* T_A = 25°C unless otherwise noted

Symbol	Parameter	Value							Units
		005	01	02	04	06	08	10	
V _{RRM}	Maximum Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
V _{RMS}	Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
V _R	DC Reverse Voltage (Rated V _R)	50	100	200	400	600	800	1000	V
I _{F(AV)}	Average Rectified Forward Current, @ T _A = 50°C	4.0							A
I _{FSM}	Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	200							A
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.

Thermal Characteristics

Symbol	Parameter	Value	Units
P _D	Power Dissipation	6.58	W
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

*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

Symbol	Parameter	Device	Units
V _F	Forward Voltage, per bridge @ 4.0 A	1.1	V
I _R	Reverse Current, total bridge @ rated V _R T _A = 25°C T _A = 100°C	5.0 500	μA μA

Typical Characteristics

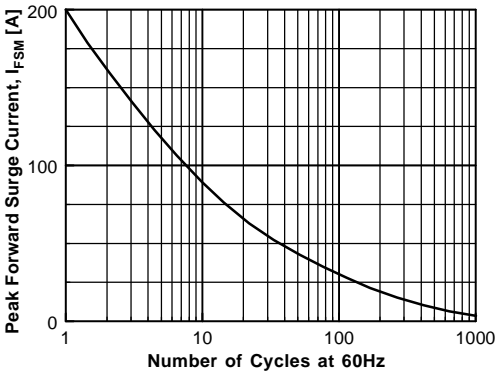


Figure 1. Non-Repetitive Surge Current

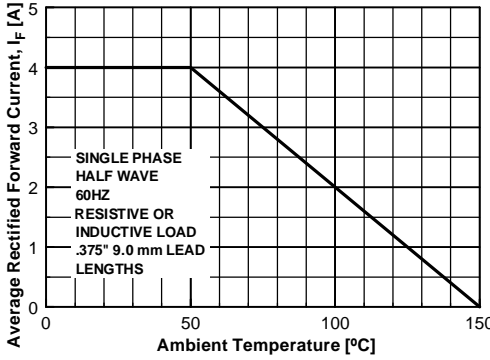


Figure 2. Forward Current Derating Curve

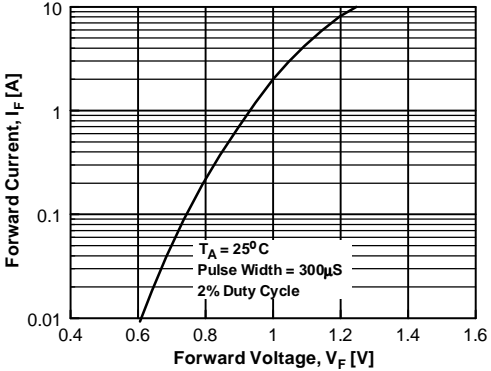


Figure 3. Forward Voltage Characteristics

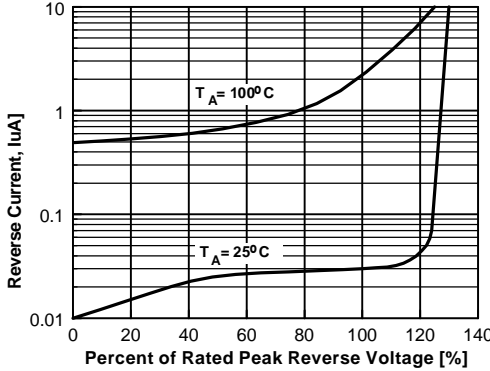


Figure 4. Reverse Current vs Reverse Voltage

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