

## KBL005 THRU KBL10

### Single Phase 4.0 AMPS. Silicon Bridge Rectifiers

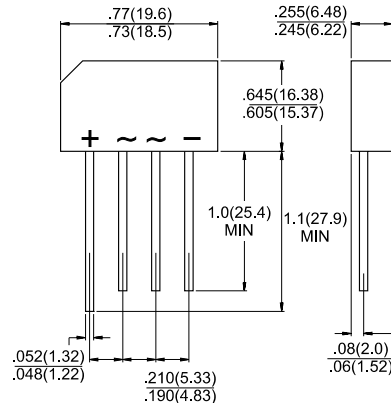


Voltage Range  
50 to 1000 Volts  
Current  
4.0 Amperes

#### KBL

#### Features

- ✧ UL Recognized
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction
- ✧ High surge current capability
- ✧ High temperature soldering guaranteed:  
250°C / 10 seconds / 0.375" ( 9.5mm )  
lead length at 5 lbs., ( 2.3 kg ) tension
- ✧ Leads solderable per MIL-STD-202,  
Method 208



Dimensions in inches and (millimeters)

#### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	KBL 005	KBL 01	KBL 02	KBL 04	KBL 06	KBL 08	KBL 10	Units
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ T <sub>A</sub> = 50°C	4.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	200							A
Maximum Instantaneous Forward Voltage @ 4.0A	1.1							V
Maximum DC Reverse Current @ T <sub>A</sub> =25°C at Rated DC Blocking Voltage @ T <sub>A</sub> =100°C	10 500							uA uA
Typical thermal Resistance (Note 2) R <sub>θJA</sub> R <sub>θJL</sub>	19 2.4							°C/W
Operating Temperature Range T <sub>J</sub>	-55 to +125							°C
Storage Temperature Range T <sub>STG</sub>	-55 to +150							°C

Note: 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 (KBL005 THRU KBL10)

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

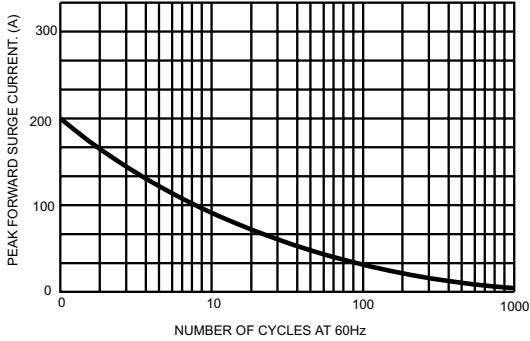


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

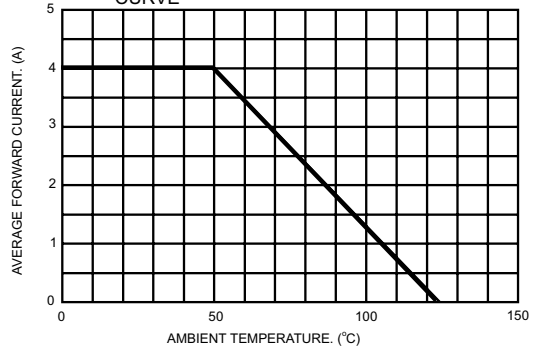


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

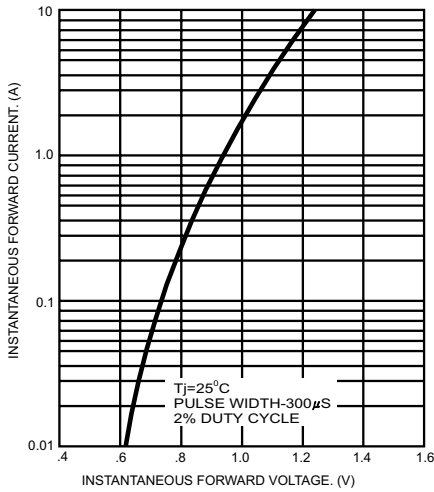


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

