KBL401 THRU KBL407

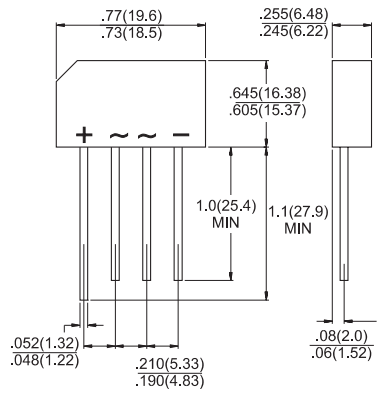
Single Phase 4.0 AMPS. Silicon Bridge Rectifiers

Voltage Range
50 to 1000 Volts
Current
4.0 Amperes

Features

- ✧ UL Recognized File # E-96005
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction
- ✧ High surge current capability
- ✧ High temperature soldering guaranteed: 260℃ / 10 seconds / 0.375" (9.5mm) lead length at 5 lbs., (2.3 kg) tension
- ✧ Leads solderable per MIL-STD-202, Method 208

KBL



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Type Number	Symbol	KBL 401	KBL 402	KBL 403	KBL 404	KBL 405	KBL 406	KBL 407	Units
Maximum Recurrent 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 @T_A = 50℃	$I_{(AV)}$	4.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	200							A
Maximum Instantaneous Forward Voltage @ 4.0A	V_F	1.1							V
Maximum DC Reverse Current @ T_A=25℃ at Rated DC Blocking Voltage @ T_A=100℃	I_R	10 500							uA uA
Typical thermal Resistance (Note 1)	$R\theta_{JA}$ $R\theta_{JL}$	19 2.4							℃/W
Operating Temperature Range	T_J	-55 to +125							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: 1. Thermal Resistance from Junction to Ambient and Junction to Lead with units Mounted on P.C.B. at 0.375" (9.5mm) Lead Length and 0.6" x 0.6" (16 x 16mm) Copper Pads.

RATINGS AND CHARACTERISTIC CURVES (KBL401 THRU KBL407)

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

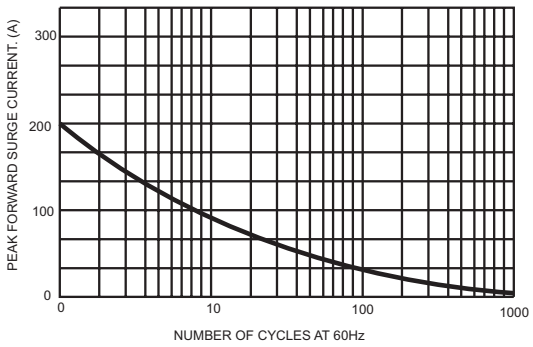


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

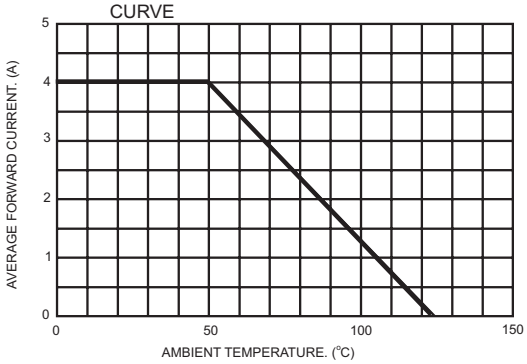


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

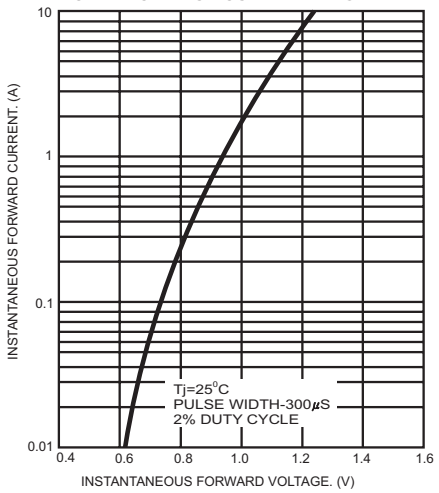


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT