



KBL401G THRU KBL407G

Single Phase 4.0 AMPS. Glass Passivated Bridge Rectifiers

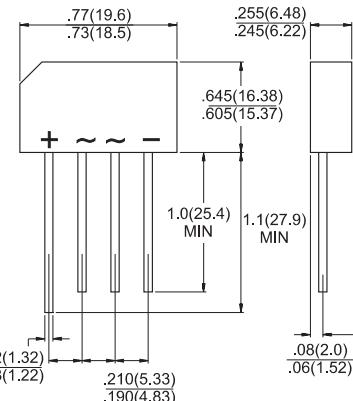


Voltage Range
50 to 1000 Volts
Current
4.0 Amperes

KBL

Features

- ◇ UL Recognized File # E-96005
- ◇ Glass passivated junction
- ◇ Ideal for printed circuit board
- ◇ Reliable low cost construction
- ◇ High surge current capability
- ◇ High temperature soldering guaranteed:
260°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	Symbol	KBL 401G	KBL 402G	KBL 403G	KBL 404G	KBL 405G	KBL 406G	KBL 407G	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 @ $T_A = 50^\circ\text{C}$	$I_{(AV)}$	4.0						A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150						A	
Maximum Instantaneous Forward Voltage @ 4.0A	V_F	1.1						V	
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	I_R	10 500						uA uA	
Typical Thermal Resistance (Note)	$R_{\theta JA}$ $R_{\theta JL}$	19 2.4						°C/W	
Operating Temperature Range	T_J	-55 to +150						°C	
Storage Temperature Range	T_{STG}	-55 to +150						°C	

Note: Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B.
With 0.47 x 0.47" (12 x 12mm) Copper Pads.

RATINGS AND CHARACTERISTIC CURVES (KBL401G THRU KBL407G)

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

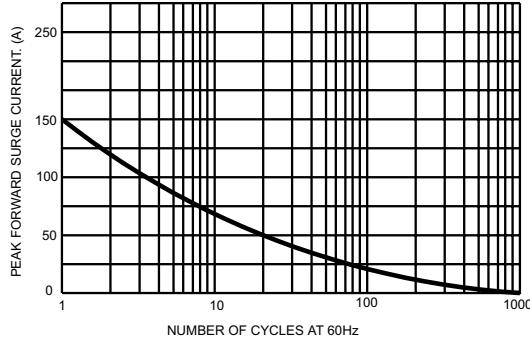


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

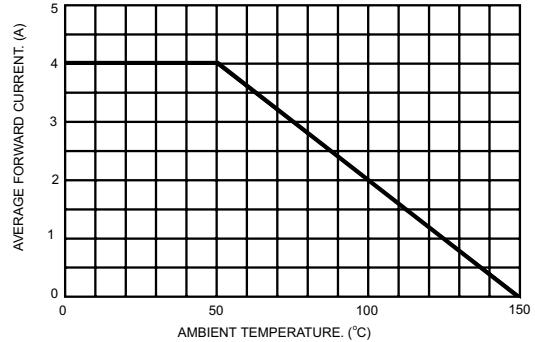


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

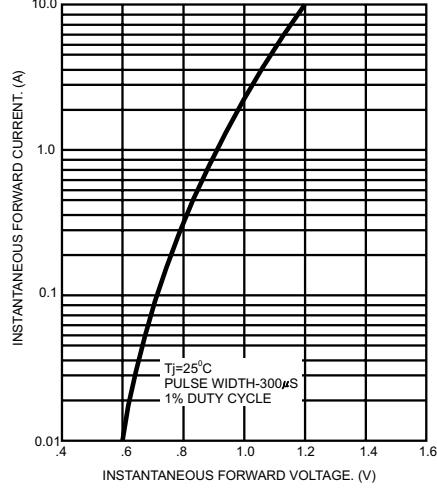


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

