

KBL400 Thru KBL410

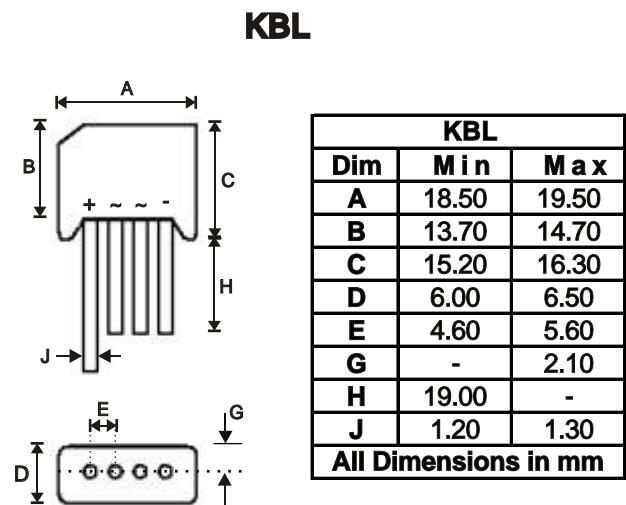
Reverse Voltage: 50 - 1000 Volts
Forward Current: 4.0 Amp

Features

- Diffused Junction
- Low Forward Voltage Drop
- High Reliability
- High Current Capability
- High Surge Current Capability
- Ideal for Printed Circuit Boards

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL STD-202, Method 208
- Weight: 5.6 grams (approx.)
- Mounting Position: Any



Maximum Ratings and Electrical Characteristics

Rating at 25°C unless otherwise specified.

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

For capacitive load, derate current by 20%.

CHARACTERISTICS	Symbol	KBL 400	KBL 401	KBL 402	KBL 404	KBL 406	KBL 408	KBL 410	UNIT
Peak Repetitive Reverse Voltage	V_{RRM}								
Working Peak Reverse Voltage	V_{RWM}	50	100	200	400	600	800	1000	V
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note1) @ $T_A = 75^\circ C$	I_O								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}								A
Forward Voltage (per element) @ $I_F = 2.0A$	V_{FM}								V
Peak Reverse Current @ $T_C = 25^\circ C$	I_R								uA
At Rated DC Blocking Voltage @ $T_C = 100^\circ C$									mA
I^2t Rating for Fusing ($t < 8.3ms$) (Note1)	I^2t								A^2s
Typical Thermal Resistance (Note2)	R_{JC}								K/W
Operating and Storage Temperature Range	T_J, T_{STG}								°C

Note: 1. Non-repetitive for $t > 1ms$ and $< 8.3ms$.

2. Thermal resistance junction to ambient mounted on PC board with $13.0 \times 13.0 \times 0.03mm$ thick land areas.

Rating and Characteristic Curves (KBL400 thru 410)

FIG.1- MAXIMUM NON-REPETITIVE PEAK Fwd SURGE CURRENT

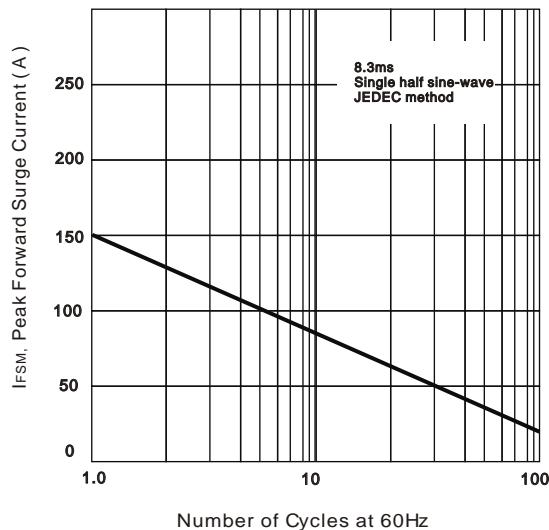


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

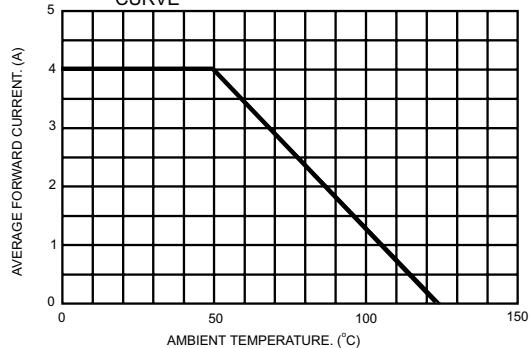


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

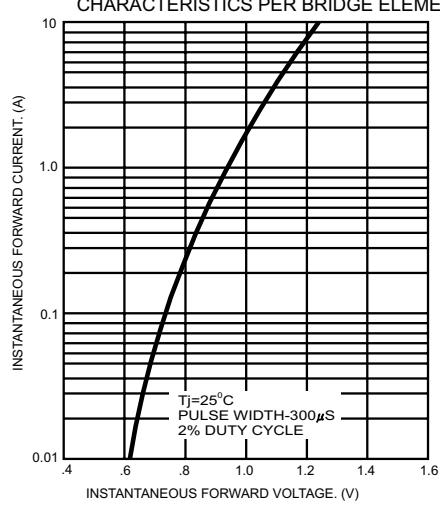


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

