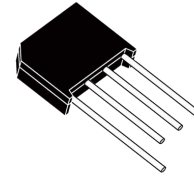


**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 4.0 A**

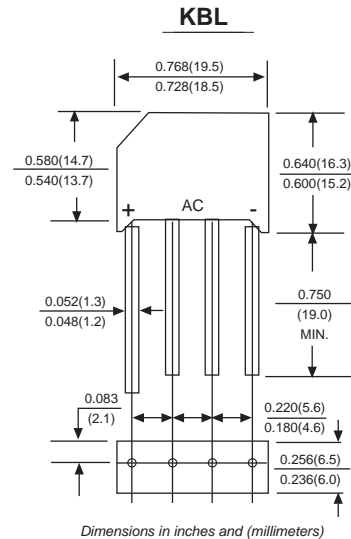


### Features

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

### Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 5.6 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



### Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	KBL 400	KBL 401	KBL 402	KBL 404	KBL 406	KBL 408	KBL 410	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$								V
Working Peak Reverse Voltage	$V_{RWM}$	50	100	200	400	600	800	1000	
DC Blocking Voltage	$V_R$								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_C = 75^\circ\text{C}$	$I_O$	4.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150							A
Forward Voltage (per element) @ $I_F = 2.0\text{A}$	$V_{FM}$	1.1							V
Peak Reverse Current @ $T_C = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_C = 100^\circ\text{C}$	$I_R$	10 1.0							$\mu\text{A}$ mA
Rating for Fusing ( $t < 8.3\text{ms}$ ) (Note 1)	$I_t^2$	166							$\text{A}^2\text{s}$
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	19							K/W
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +125							$^\circ\text{C}$

Note: 1. Non-repetitive for  $t > 1\text{ms}$  and  $< 8.3\text{ms}$ .

2. Thermal resistance junction to case per element mounted on PC board with 13.0x13.0x0.03mm thick land areas.

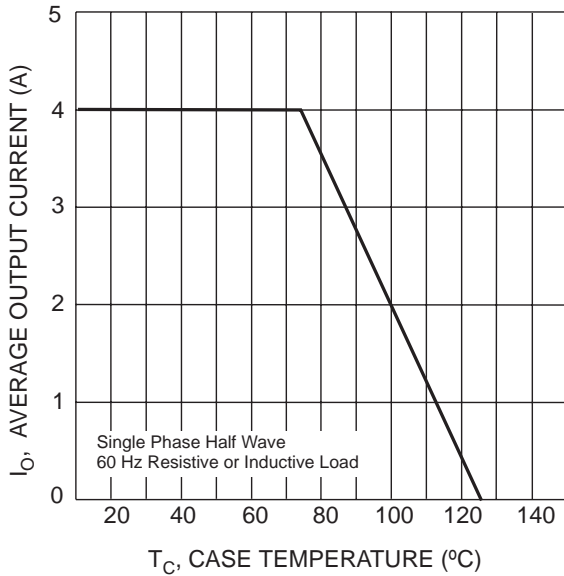


Fig. 1 Forward Current Derating Curve

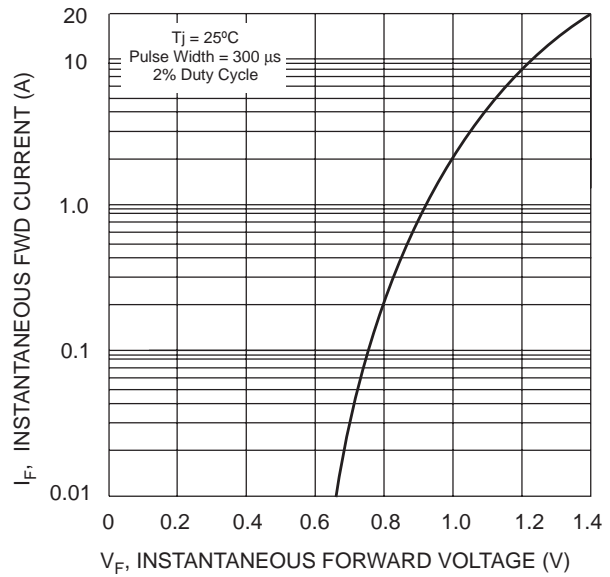


Fig. 2 Typical Forward Characteristics, per element

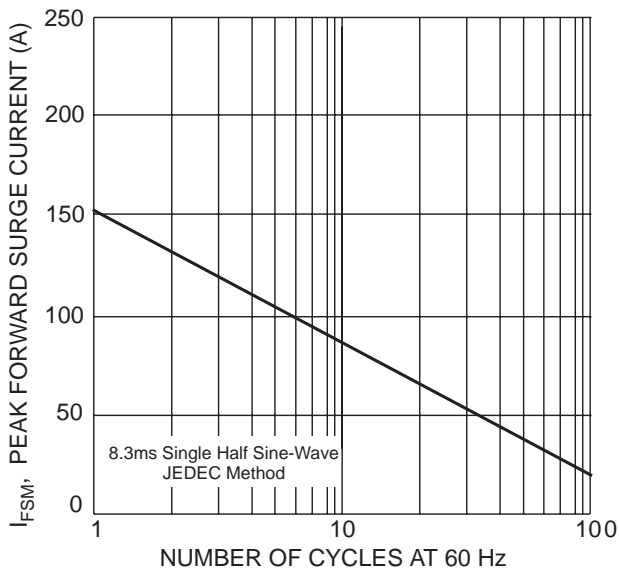


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

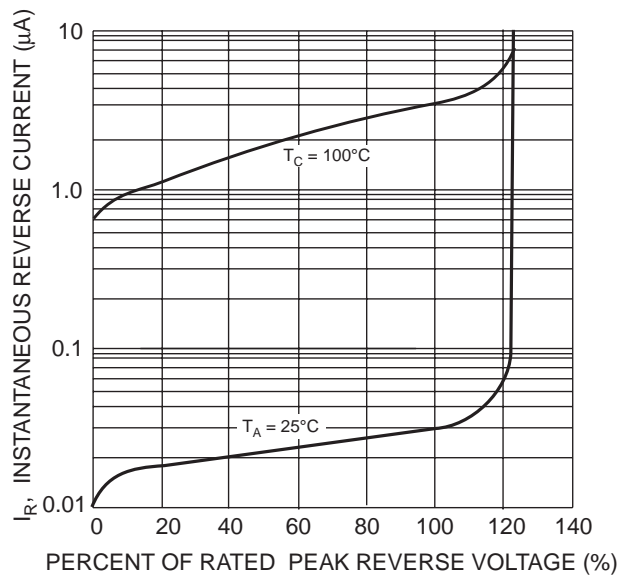


Fig. 4 Typical Reverse Characteristics, per element