

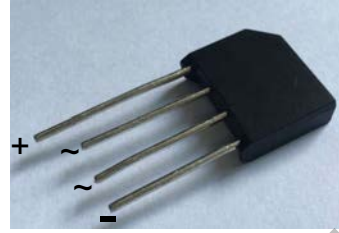


KBL4005-KBL410

Features:

- High surge current capability
- Ideal for printed circuit boards
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0

KBL



Absolute Maximum Ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	KBL 4005	KBL 401	KBL 402	KBL 404	KBL 406	KBL 408	KBL 410	Unit
Maximum Reverse Peak Repetitive Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	
Maximum Average Forward Rectified Current, @ Ta=50°C	$I_{(AV)}$	4.0							A
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	I_{FSM}	120							
Rating for fusing (t < 8.3ms)	I^2t	60							A ² s
Maximum Reverse Current @ rated V_R Tj = 25°C Tj = 125°C	I_R	10 500							µA
Maximum Forward Voltage @ 4.0 A	V_F	1.1							V
Maximum Thermal Resistance	$R_{\theta JA}$	2.6							°C/W
Operating and Storage Temperature Range	Tj, Tstg	-55 to +150							°C

Typical Characteristics

Fig. 1 Derating Curve for Output Rectified Current

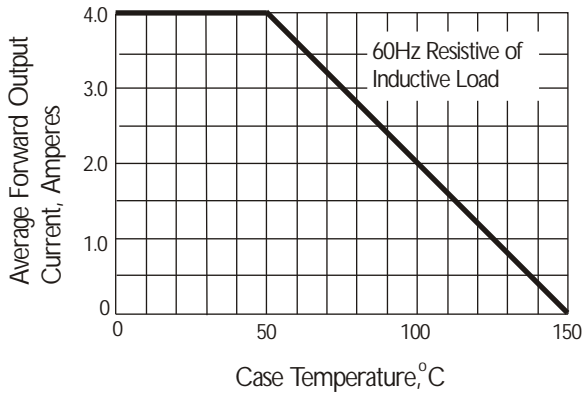


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

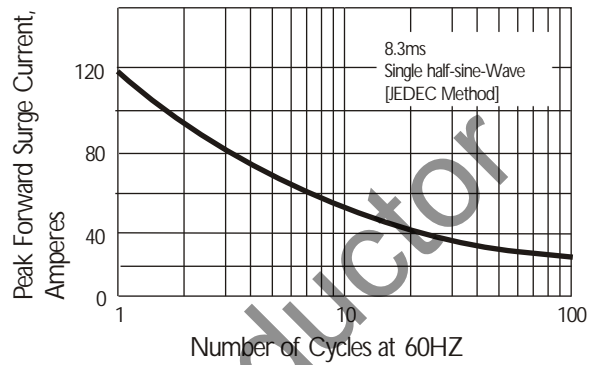


Fig. 3 Typical Instantaneous Forward Characteristics

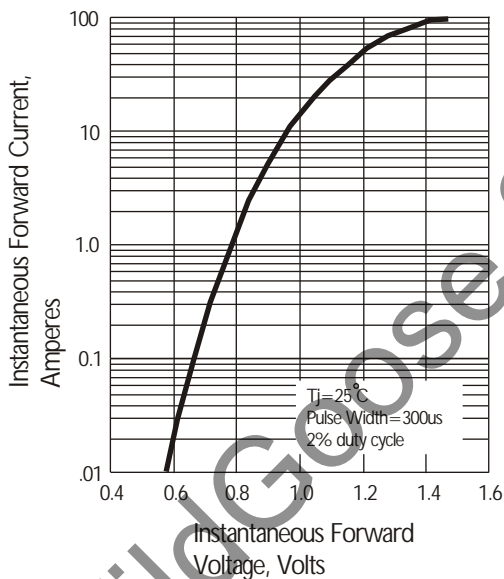


Fig. 4 Typical Reverse Characteristics at $T_J = 25^\circ\text{C}$

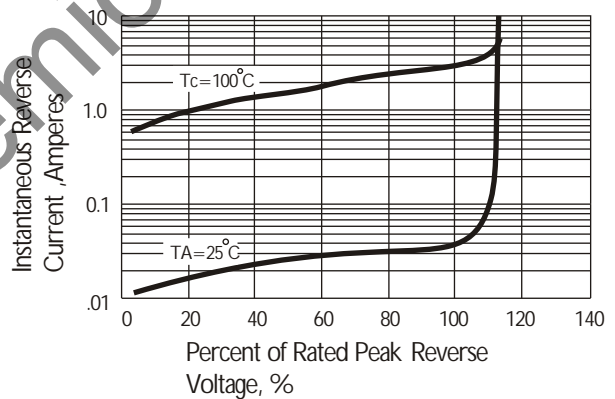
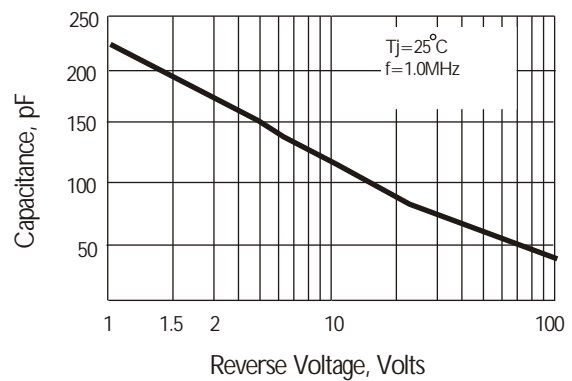
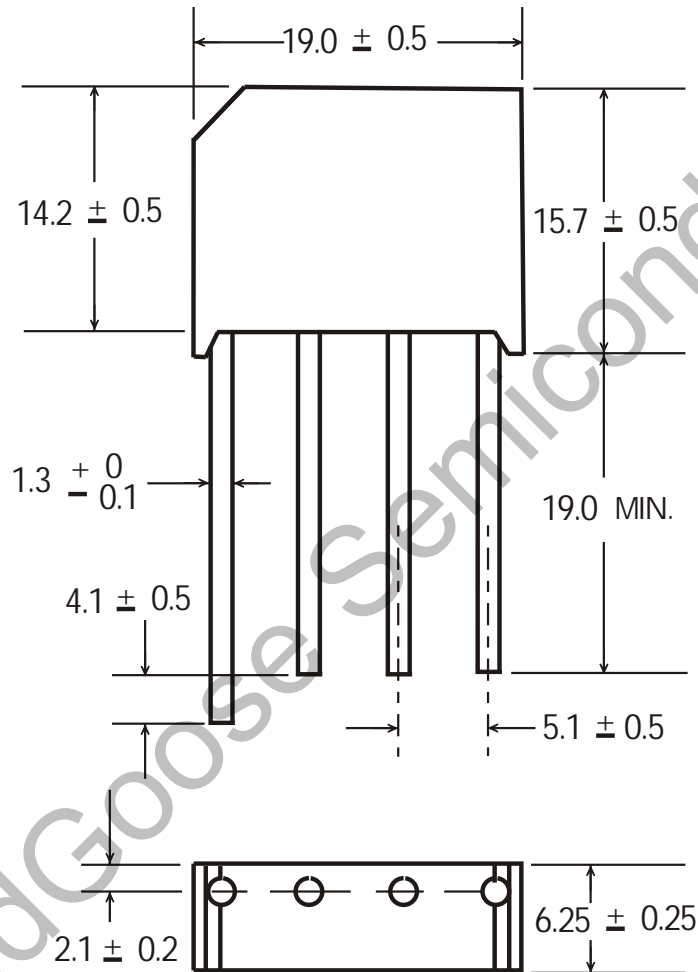


Fig. 5 Typical Junction Capacitance



Package Dimension

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Dimensions in millimeters(1mm =0.0394")