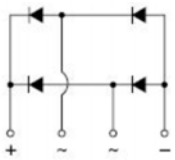
KBL10-E4/51
Plastic-Encapsulate Bridge Rectifier

Features

- Ideal for printed circuit board mounting
- This series is UL listed under the Recognized Component Index, file number E142814
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Built-in printed circuit board stand-offs
- High case dielectric strength
- High temperature soldering guaranteed 265°C/10 seconds at 5 lbs (2.3kg) tension

KBL



Ordering Information

Product ID	Pack	Qty(PCS)
KBL10-E4/51	KBL	500

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

Parameter	Symbol	KBL10-E4/51	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	1000	V
Maximum RMS bridge input voltage	V_{RMS}	700	V
Maximum DC blocking voltage	V_{DC}	1000	V
Maximum average forward rectified output current at T_A=50 °C	$I_{F(AV)}$	4.0	A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200	A
Rating for fusing (t<8.3ms)	I^2t	166	A^2sec
Typical thermal resistance per element (1)	$R_{\theta JA}$	10.0	°C / W
Operating junction and storage temperature range	T_J, T_{STG}	-55 to + 150	°C

Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.
For Capacitive load derate by 20 %.

Parameter	Symbol	KBL10-E4/51	Unit
Maximum instantaneous forward voltage drop per leg at 4.0A	V_F	1.1	V
Maximum DC reverse current at rated DC blocking voltage per element TA =25°C TA =125°C	I_R	10 1000	μA

Notes: (1)Thermal resistance from Junction to Ambemt on P.C.board mounting.

Rating and Characteristic Curves(T_A=25°C unless otherwise noted)

Fig. 1 Derating Curve for Output Rectified Current

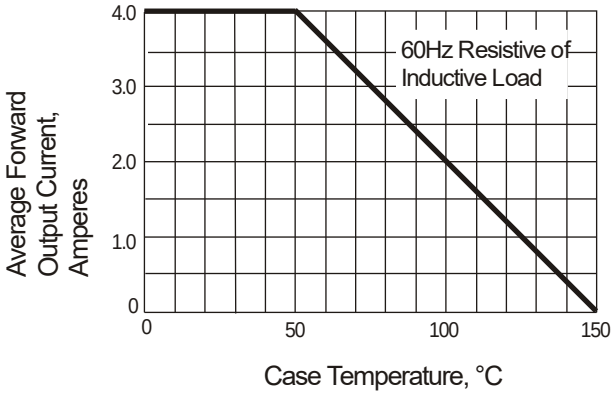


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

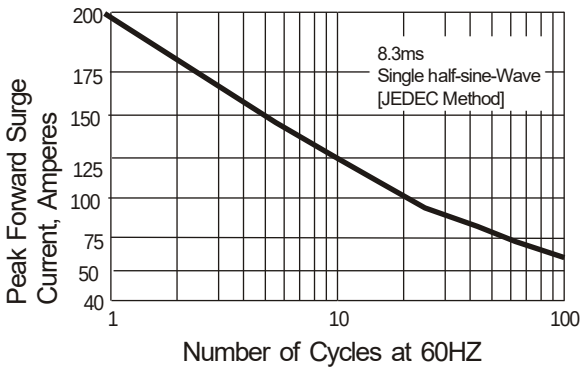


Fig. 3 Typical Instantaneous Forward Characteristics

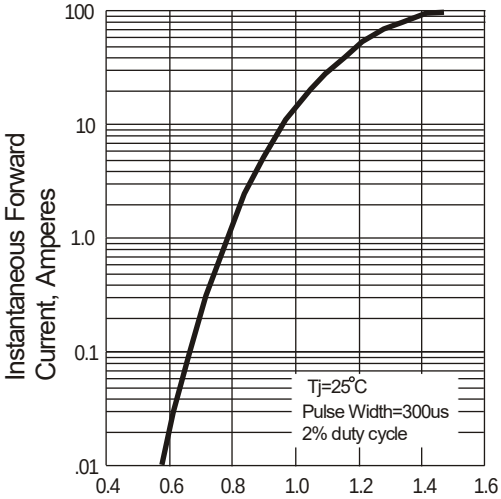


Fig. 4 Typical Reverse Characteristics at Tj=25°C

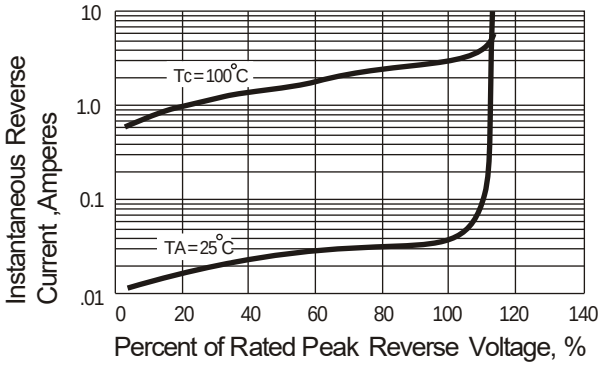
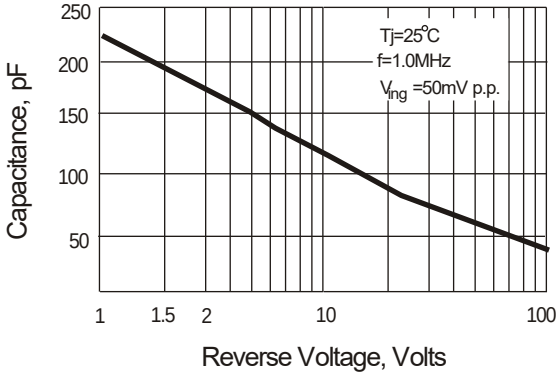
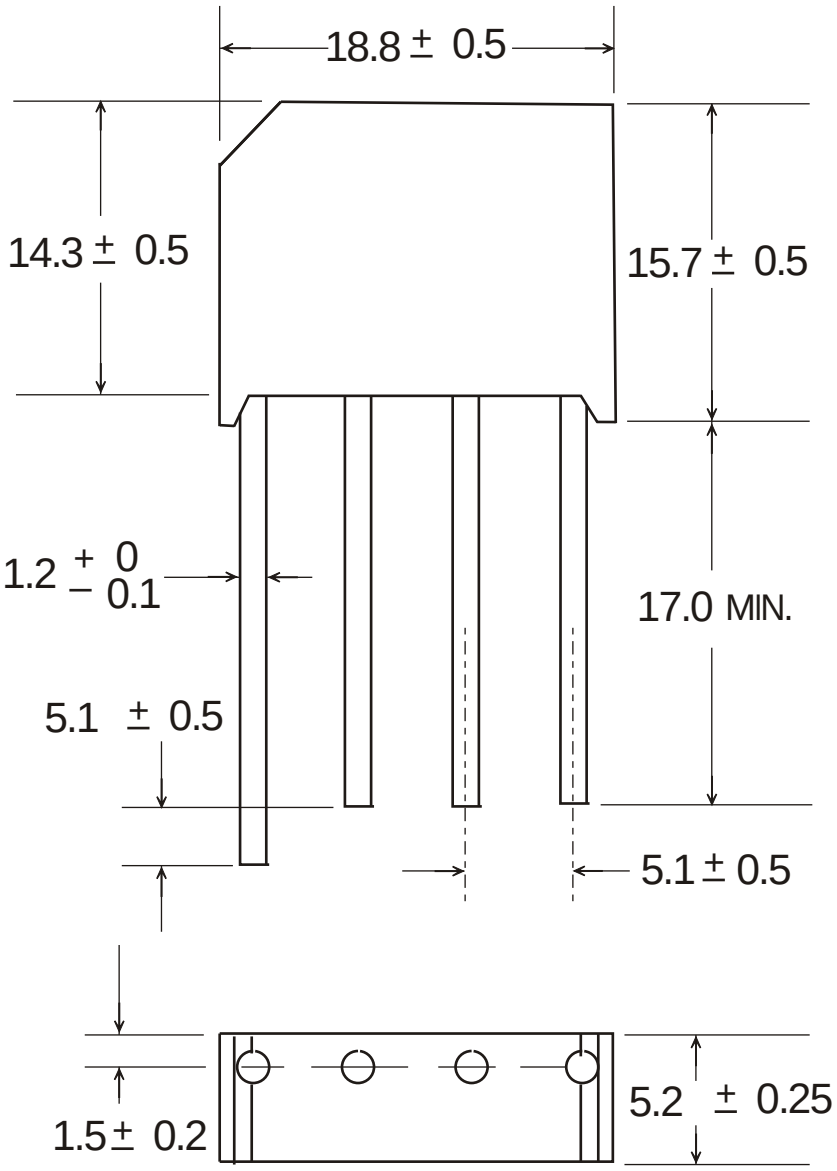


Fig. 5 Typical Junction Capacitance



KBL Package Outline Dimensions



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