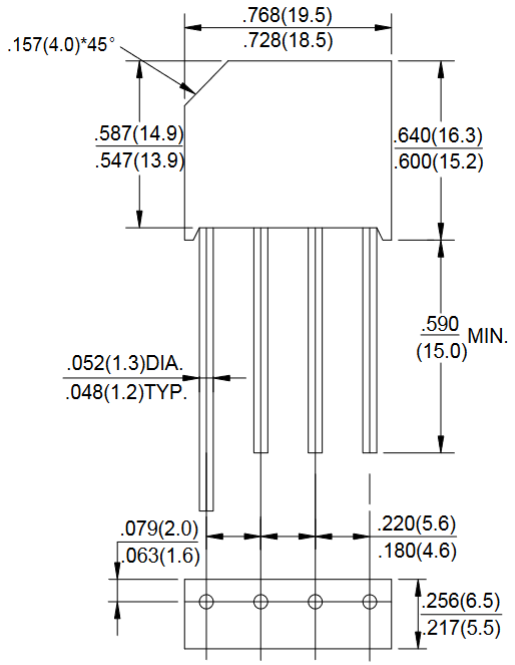
SMD Rectifier Bridge

Primary characteristics		
Parameter	**Value**	**Unit**
Maximum Repetitive Peak Reverse Voltage	100 ~ 1000	V
Maximum Average Forward Rectified Current	4.0	A

Case dimensions



Dimensions in inches and (milimeters)

KBL

Features

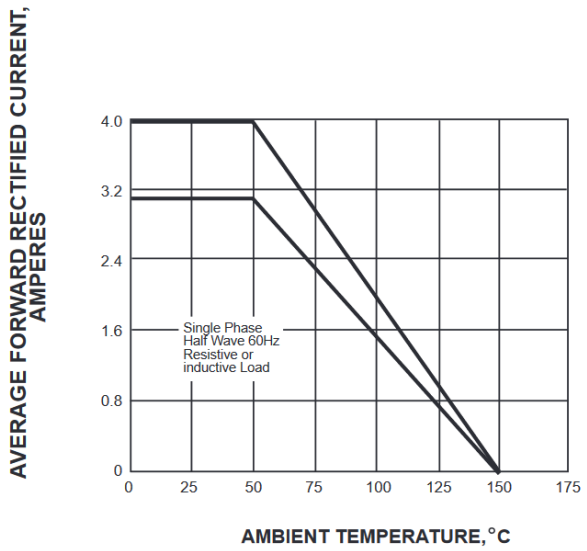
- **KBL** case for easy automatic insertion.
- Pb-free and **RoHS** compliant
- Low forward voltage drop
- High current capability
- Glass passivated chip junction
- Low power loss, high efficiency
- Solderable per MIL-STD-202, Method 208
- Weight: 5.6g/0.2oz

Absolute maximum ratings and general electrical characteristics (T_a = 25°C)

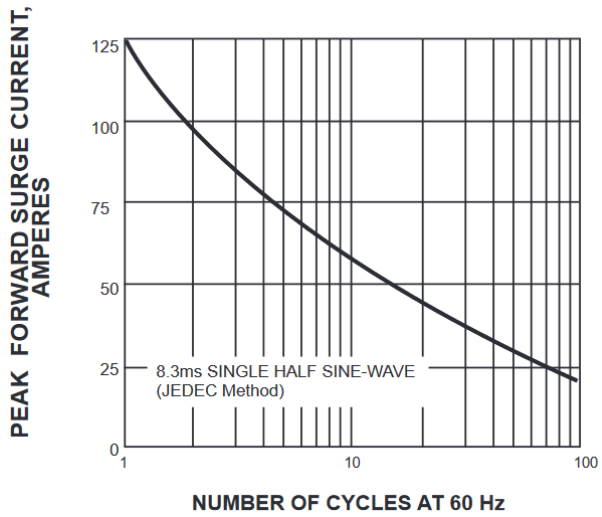
Parameter		Symbol	Value						Unit
			KBL401	KBL402	KBL404	KBL406	KBL408	KBL410	
Maximum repetitive peak reverse voltage		V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage		V_{RMS}	70	140	280	420	560	700	V
Maximum DC blocking voltage		V_{DC}	100	200	400	600	800	1000	V
Maximum average forward rectified current	T_C=100°C	$I_{(AV)}$	4.0						A
Peak forward surge current 8.3mS single half sine wave superimposed on rated load (JEDEC method)		I_{FSM}	125						A
Maximum instantaneous forward voltage @I_F=2.0A, 25°C		V_F	1.0						V
Maximum DC reverse current at rated DC blocking voltage	T_a=25°C	I_R	10						μA
	T_a=125°C		500						μA
I2t rating for fusing (3ms≤t≤8.3ms)		I^2t	166						A^2S
Typical junction capacitance [1]		C_j	105						pF
Typical thermal resistance [2]		$R_{\theta JA}$	20						°C/W
Operating junction and storage temperature range		T_j, T_{STG}	-55 ~ 150						°C

1) Measured at 1.0MHz and applied reverse voltage of 4.0VDC
2) Unit case mounted on 7.5" x 7.5" x 0.3cm" aluminium plate heat sink

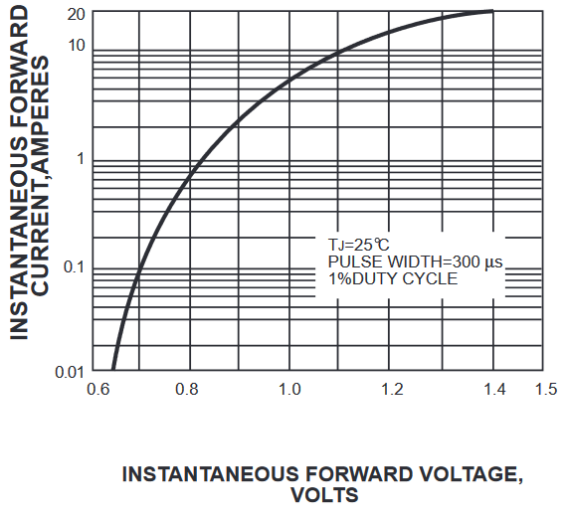
Forward current derating curve



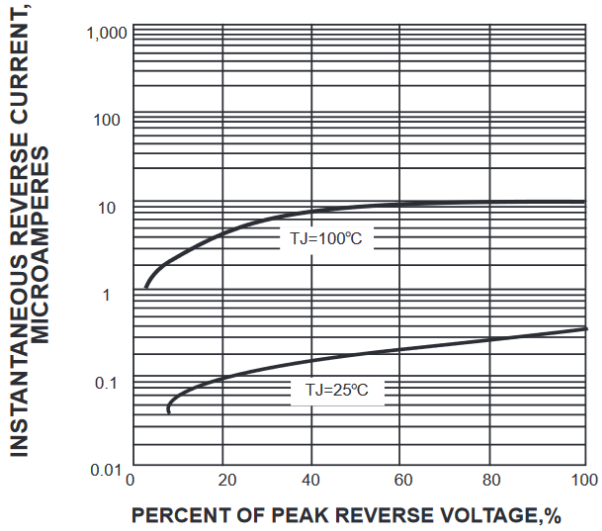
Maximum non-repetitive peak forward surge current



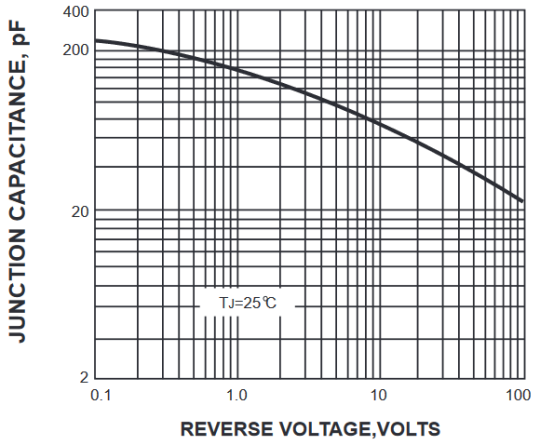
Typical junction capacitance



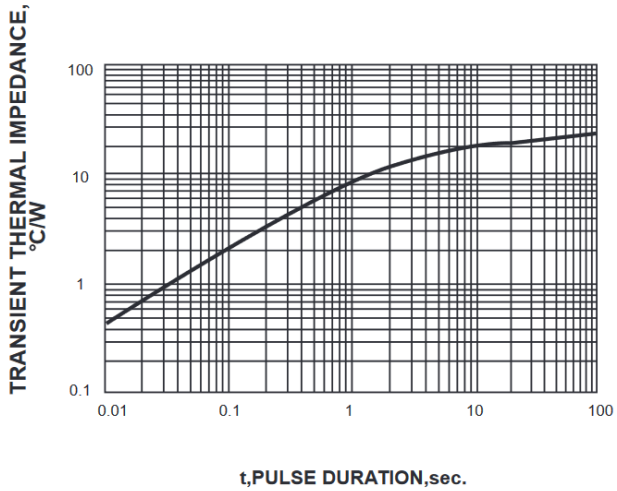
Typical reverse characteristics



Typical junction capacitance



Typical transient thermal impedance



Ordering information			
Part Number	**Package**	**Shipping Quantity**	**Industry standard**
KBL401 ~ KBL410	KBL	**500 pcs**	EIA-481-1

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