

KBL4005 THRU KBL410

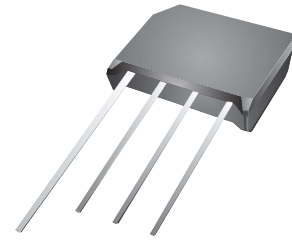


Glass Passivated Bridge Rectifiers

Reverse Voltage: 50 to 1000 Volts

Forward Current: 4.0 Ampere

RoHS Device

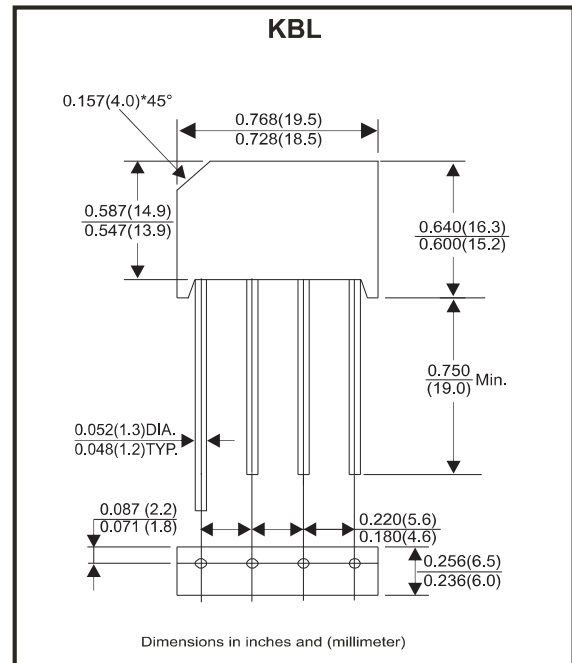


Features

- Glass passivated chip
- Low forward voltage drop
- Ideal for printed circuit board
- High surge current capability

Mechanical Data

- Polarity: Symbol marked on body
- Mounting position: Any



Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

Parameter	Symbol	KBL 4005	KBL 401	KBL 402	KBL 404	KBL 406	KBL 408	KBL 410	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_A=50^{\circ}\text{C}$ (Note 1)	I_{AV}	4.0							A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave, Super Imposed On Rated Load (JEDEC Method)	I_{FSM}	125							A
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	64.8							A^2s
Peak Forward Voltage per Diode at 4.0A DC	V_F	1.1							V
Maximum DC Reverse Current at Rated @ $T_J=25^{\circ}\text{C}$ DC Blocking Voltage per Diode @ $T_J=150^{\circ}\text{C}$	I_R	10.0							μA
		1.0							mA
Operating Junction Temperature Range	T_J	-55 to +150							$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^{\circ}\text{C}$

Notes:

1. Mounting conditions, 0.5" lead length maximum.

Company reserves the right to improve product design, functions and reliability without notice.

Rev:1.0

Rating and Characteristics Curves

Fig.1 - Forward Current Derating Curve

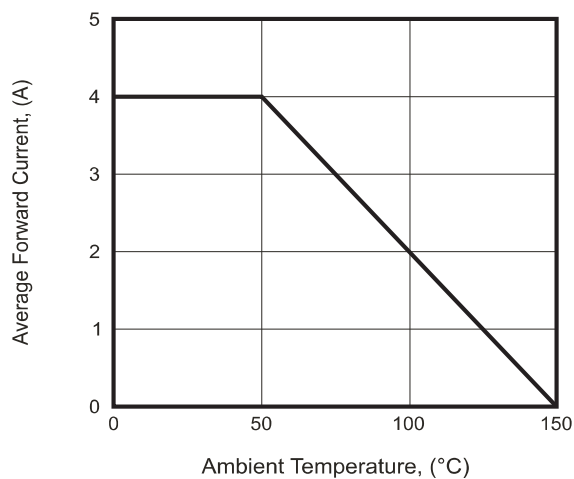


Fig.2 - Maximum Non-Repetitive Surge Current

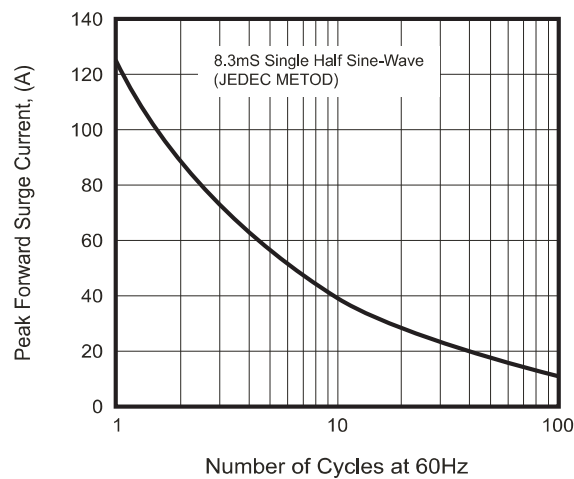


Fig.3 - Typical Reverse Characteristics

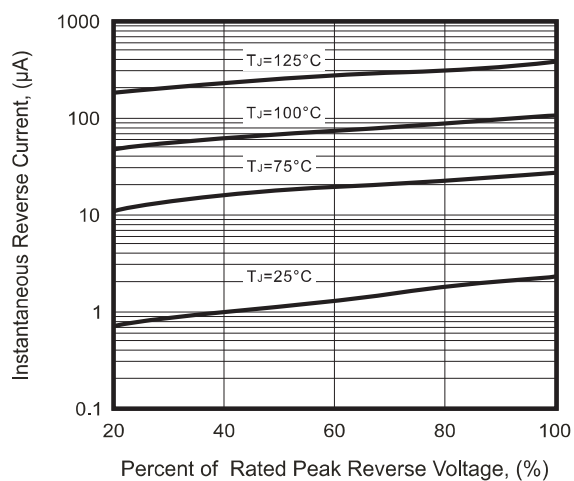
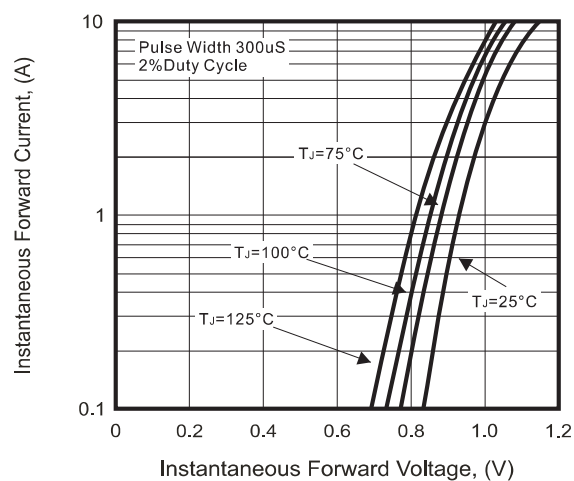
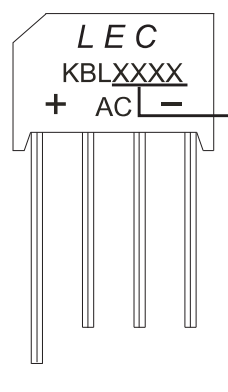


Fig.4 - Typical Forward Characteristics



Marking Code

Part Number	Marking code
KBL4005	KBL4005
KBL401	KBL401
KBL402	KBL402
KBL404	KBL404
KBL406	KBL406
KBL408	KBL408
KBL410	KBL410



XXX / XXXX = Product type marking code
LEC = Longmacro Logo

Standard Packaging

Case Type	BULK PACK	
	BOX (pcs)	CARTON (pcs)
KBL	500	3,000