

Glass Passivated Bridge Rectifiers

FEATURES

- Glass passivated junction
- Ideal for printed circuit board
- Reliable low cost construction
- UL Recognized File # E-326243
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC


KBL


MECHANICAL DATA

Case: KBL

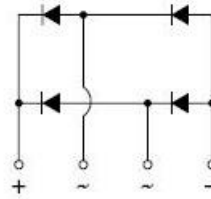
Molding compound, UL flammability classification rating 94V-0

Terminal: Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 1A whisker test

Polarity: Polarity as marked on the body

Weight: 5.6 g (approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	KBL 401G	KBL 402G	KBL 403G	KBL 404G	KBL 405G	KBL 406G	KBL 407G	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	$I_{F(AV)}$	4							A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	150							A
Rating for fusing ($t < 8.3\text{ms}$)	I^2t	93							A^2s
Maximum instantaneous forward voltage (Note 1) $I_F = 2\text{A}$ $I_F = 4\text{A}$	V_F				1.0 1.1				V
Maximum DC reverse current at rated DC blocking voltage	I_R				$T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$ 10 500				μA
Typical thermal resistance	$R_{\theta JL}$ $R_{\theta JA}$				2.4 19				$^\circ\text{C/W}$
Operating junction temperature range	T_J	- 55 to +150							$^\circ\text{C}$
Storage temperature range	T_{STG}	- 55 to +150							$^\circ\text{C}$

Note 1: Pulse Test with $PW=300\mu\text{s}$, 1% Duty Cycle

ORDERING INFORMATION

ORDERING CODE	PACKAGE	PACKING
KBL401G T0	KBL	500 / Trays
KBL402G T0	KBL	500 / Trays
KBL403G T0	KBL	500 / Trays
KBL404G T0	KBL	500 / Trays
KBL405G T0	KBL	500 / Trays
KBL406G T0	KBL	500 / Trays
KBL407G T0	KBL	500 / Trays

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

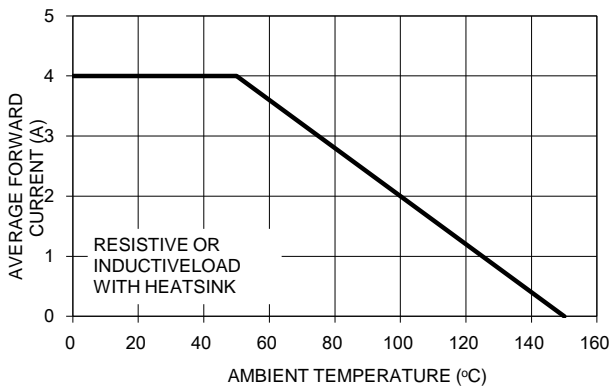


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

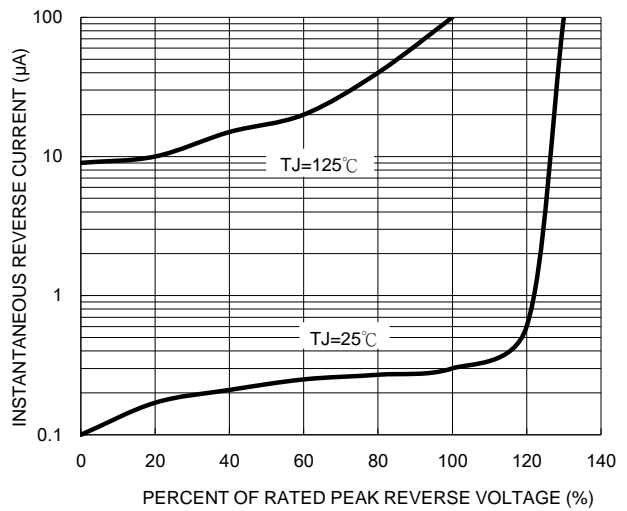


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

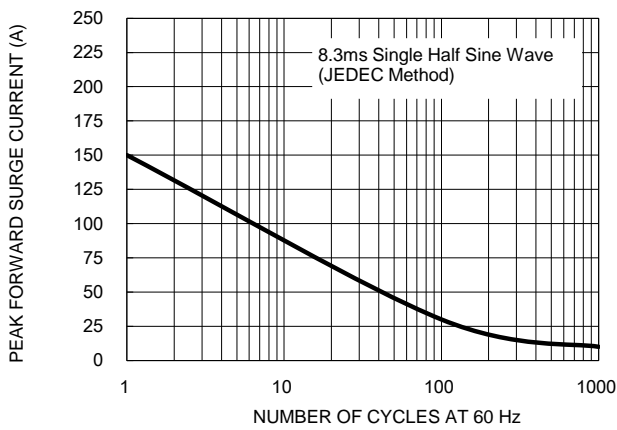


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

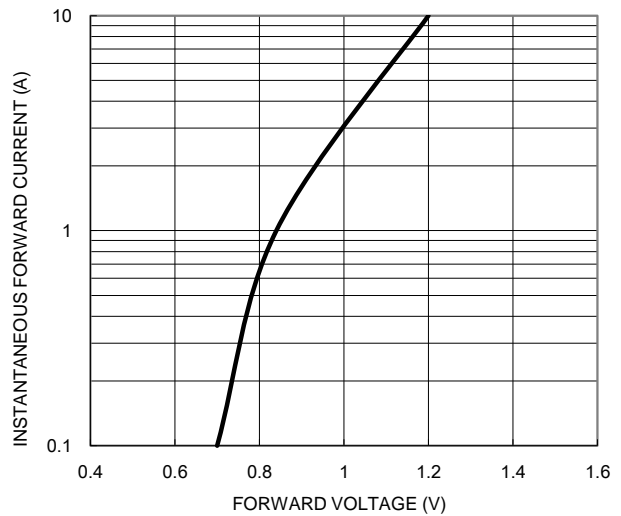
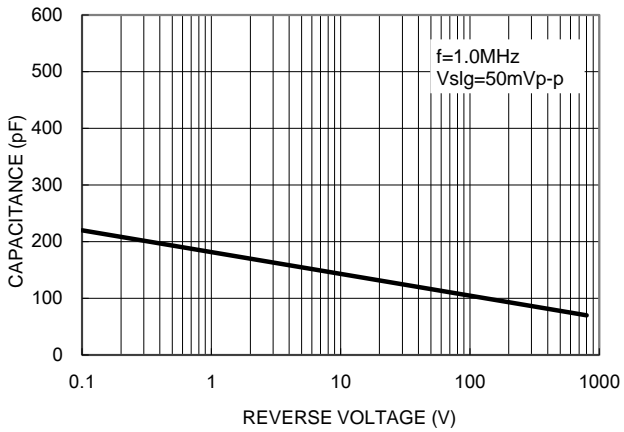
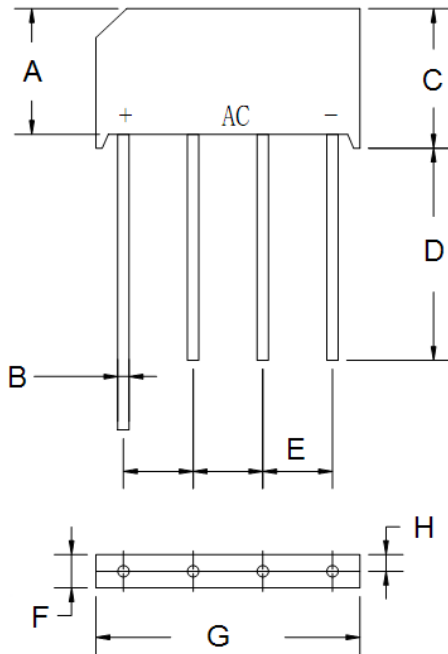


FIG. 5 TYPICAL JUNCTION CAPACITANCE

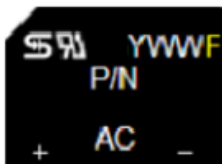


PACKAGE OUTLINE DIMENSIONS



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	13.70	14.70	0.539	0.579
B	1.20	1.30	0.047	0.051
C	15.20	16.30	0.598	0.642
D	19.00	-	0.748	-
E	4.60	5.60	0.181	0.220
F	5.50	6.50	0.217	0.256
G	18.50	19.50	0.728	0.768
H	2.1 (TYP)		0.083 (TYP)	

MARKING DIAGRAM



P/N = Specific Device Code
 YWWF = Date Code
 F = Factory Code

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