Glass Passivated Bridge Rectifiers

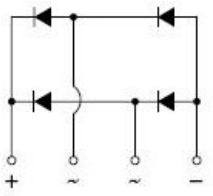
FEATURES

- 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
- Halogen-free according to IEC 61249-2-21 definition

KBL

Pb-Free

RoHS COMPLIANT



MECHANICAL DATA

Case: KBL

Molding compound, UL flammability classification rating 94V-0

Base P/N with suffix "G" on packing code - halogen-free

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℃ 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<8.3mS)	I^2t	93							A^2s
Maximum instantaneous forward voltage (Note 1) I_F= 2A I_F= 4A	V_F	 1.0 1.1							V
Maximum DC reverse current T_J=25 ℃ at rated DC blocking voltage T_J=125℃	I_R	10 500							μA
Typical thermal resistance	$R_{\theta JL}$ $R_{\theta JA}$	2.4 19							°C/W
Operating junction temperature range	T_J	- 55 to +150							°C
Storage temperature range	T_{STG}	- 55 to +150							°C

Note 1: Pulse Test with PW=300μs,1% Duty Cycle

ORDERING INFORMATION				
PART NO.	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING
KBL40xG (Note 1)	T0	Suffix "G"	KBL	500 / Tray

Note 1: "x" defines voltage from 50V (KBL401G) to 1000V (KBL407G)

EXAMPLE				
PREFERRED P/N	PART NO.	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
KBL407G T0	KBL407G	T0		
KBL407G T0G	KBL407G	T0	G	Green compound

RATINGS AND CHARACTERISTICS CURVES

(TA=25℃ unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

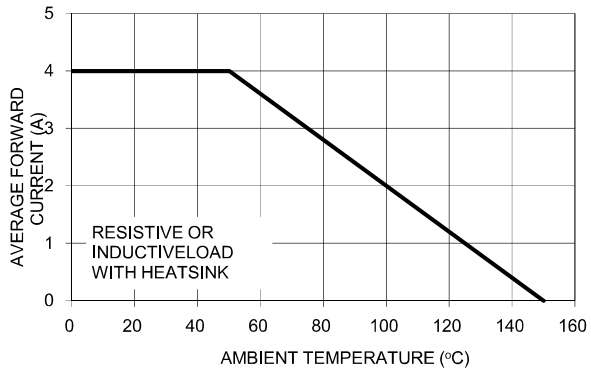


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

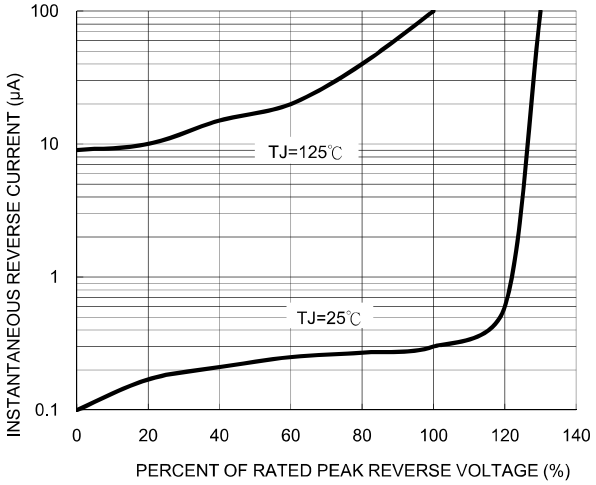


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

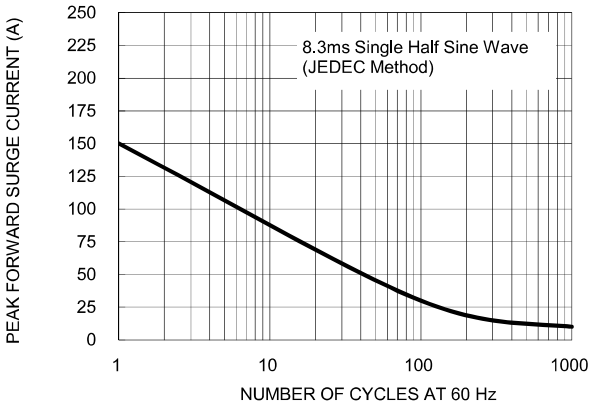


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

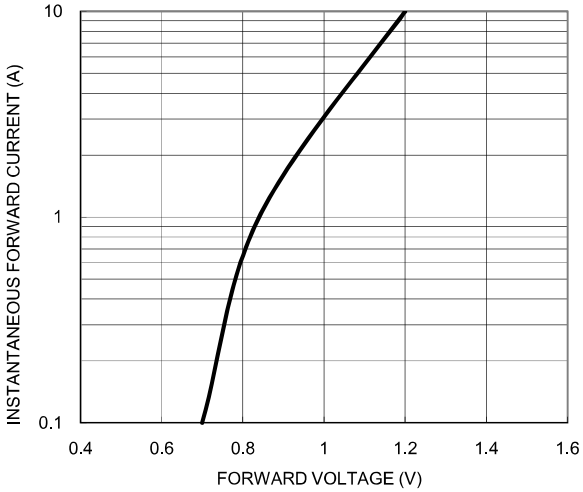
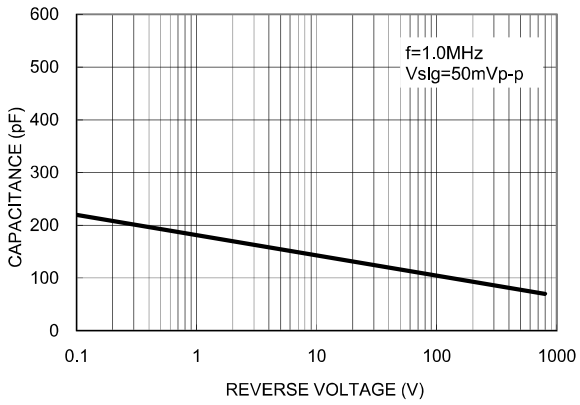
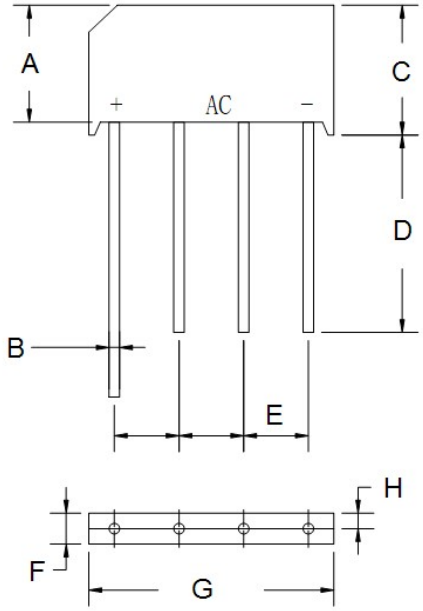


FIG. 5 TYPICAL JUNCTION CAPACITANCE



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
G = Green Compound
YWW = Date Code
F = Factory Code

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