

## 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

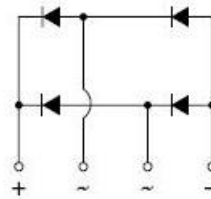
Molding compound, UL flammability classification rating 94V-0

**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 601G	KBL 602G	KBL 603G	KBL 604G	KBL 605G	KBL 606G	KBL 607G	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	$I_{F(AV)}$	6							A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	175							A
Rating for fusing ( $t < 8.3\text{ms}$ )	$I^2t$	127							$\text{A}^2\text{s}$
Maximum instantaneous forward voltage (Note 1) $I_F = 3\text{ A}$ $I_F = 6\text{ A}$	$V_F$	1.0 1.1							V
Maximum DC reverse current at rated DC blocking voltage	$I_R$	10 500							$\mu\text{A}$
Typical thermal resistance	$R_{\theta JL}$	7.5							$^{\circ}\text{C/W}$
	$R_{\theta JA}$	13							
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
KBL601G T0	KBL	500 / Trays
KBL602G T0	KBL	500 / Trays
KBL603G T0	KBL	500 / Trays
KBL604G T0	KBL	500 / Trays
KBL605G T0	KBL	500 / Trays
KBL606G T0	KBL	500 / Trays
KBL607G T0	KBL	500 / Trays

**RATINGS AND CHARACTERISTICS CURVES**

(TA=25°C unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

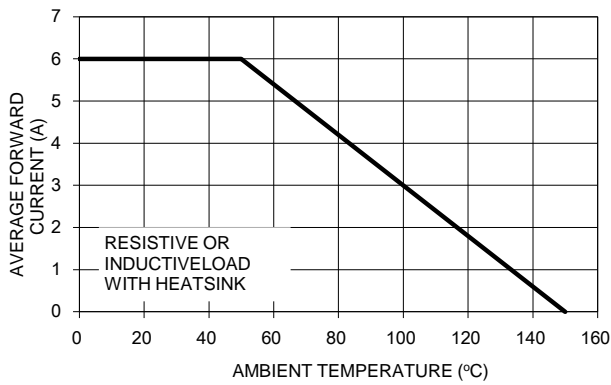


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

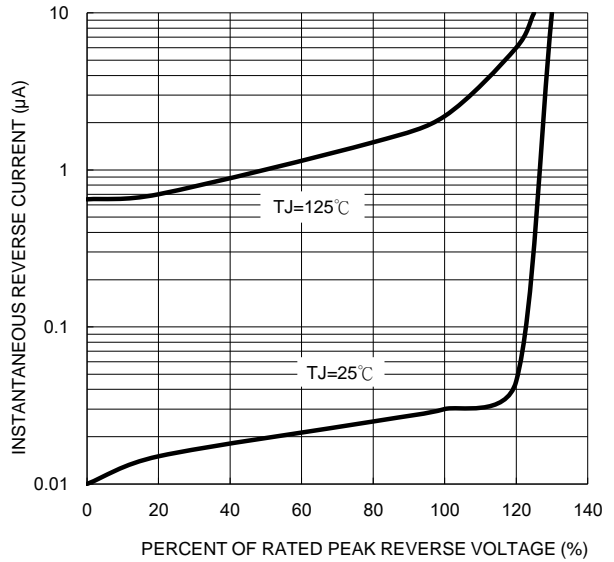


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

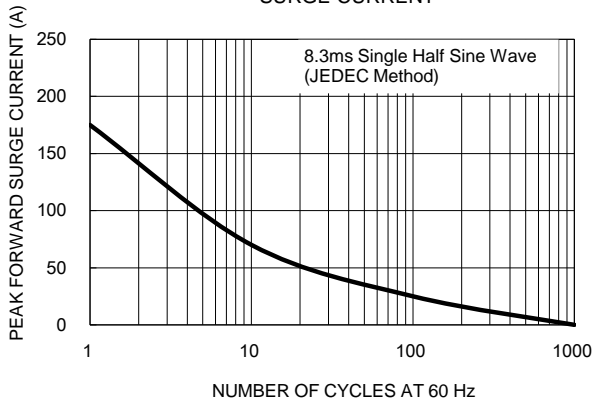


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

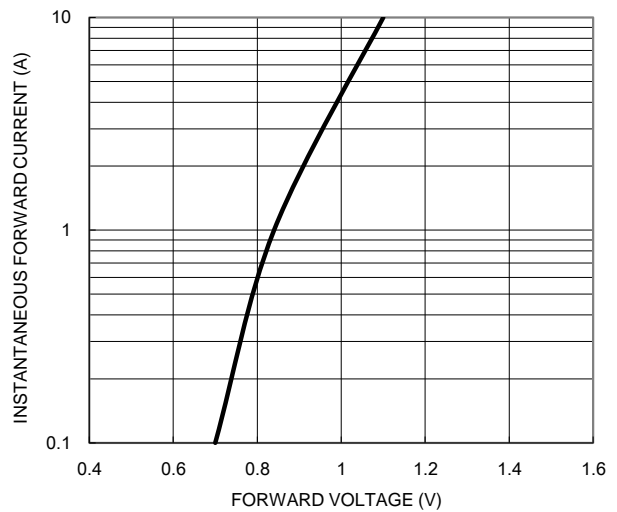
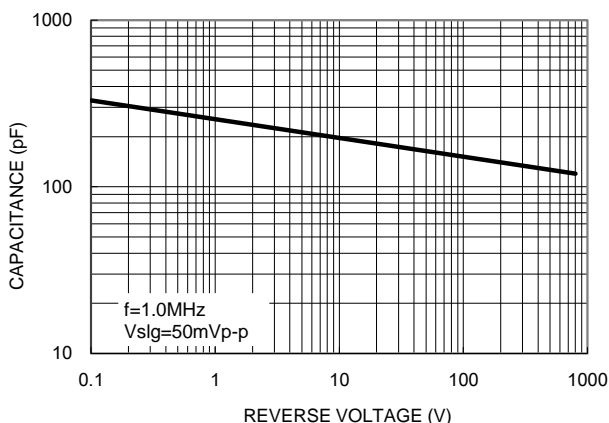
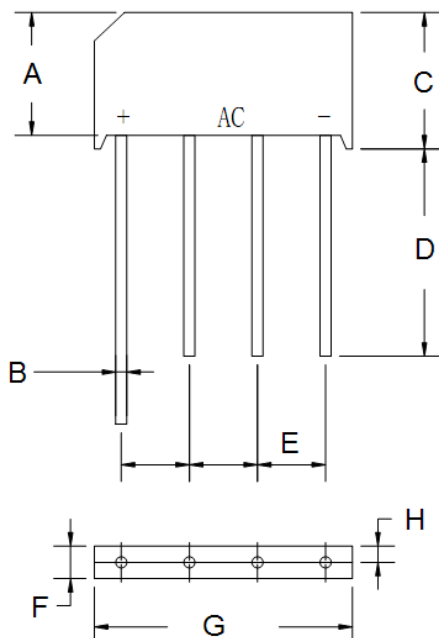


FIG. 5 TYPICAL JUNCTION CAPACITANCE

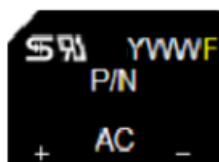


**PACKAGE OUTLINE DIMENSIONS**



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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