LITE-ON SEMICONDUCTOR

KBJ404G thru KBJ410G

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE – 400 to 1000 Volts
FORWARD CURRENT – 4.0 Amperes

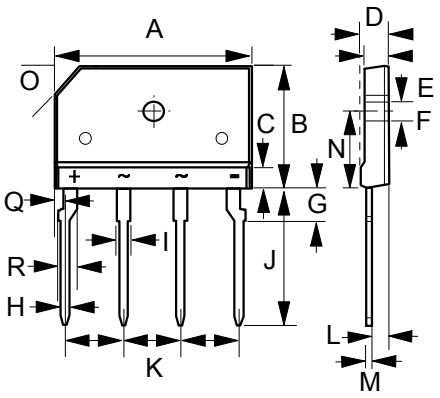
FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- UL recognized file # E95060

MECHANICAL DATA

- Case: KBJ
- Case Material: Plastic material, UL flammability classification 94V-0
- Polarity indicator: Symbol molded on body
- Weight: 4.29 grams (Approximate)

KBJ



KBJ		
DIM	MIN	MAX
A	24.80	25.20
B	14.70	15.30
C	3.90	4.10
D	4.40	4.80
E	3.40	3.80
F	3.10Ø	3.40Ø
G	3.30	3.70
H	0.90	1.10
I	1.50	1.90
J	17.20	17.80
K	7.30	7.70
L	2.50	2.90
M	0.60	0.80
N	9.30	9.70
O	3.0 x 45°	
Q	1.05	1.45
R	1.70	2.10
All dimension in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

ABSOLUTE RATINGS

PARAMETER		SYMBOL	KBJ404G	KBJ406G	KBJ408G	KBJ410G	UNIT
Maximum repetitive peak reverse voltage		V_{RRM}	400	600	800	1000	V
Maximum DC blocking voltage		V_{DC}	400	600	800	1000	V
Average rectified output current per device @T_C = 115 °C	with heatsink (Note 2) without heatsink	$I_{(AV)}$	4.0 2.6				A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	@ T_J=25°C @ T_J=125°C	I_{FSM}	135 120				A
Peak forward surge current 1ms single half sine-wave superimposed on rated load	@ T_J=25°C @ T_J=125°C	I_{FSM}	270 240				A
I^2t rating for fusing (t = 8.3ms)		I^2t	75.6				A^2S
Storage temperature range		T_J ,T_{STG}	-55 to +150				°C

STATIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITION		SYMBOL	MAX	UNIT
Forward voltage	I_F = 2.0A I_F = 4.0A	T_J = 25°C	V_F	1.0 1.1	V
Leakage current	V_R at rated	T_J = 25°C T_J = 125°C	I_R	5 500	uA
Typical junction capacitance (Note 1)			C_J	40	pF

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	TYP.	UNIT
Typical thermal resistance (Note 2)	$RthJ_C$	5.5	°C/W

REV. 11, JUN.-2015, KBDF03

Note :
(1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC
(2) Thermal resistance junction to case in accordance with JESD-51. Unit mounted on 75mm * 75mm *1.6mm Cu plate heatsink.

RATING AND CHARACTERISTIC CURVES
KBJ404G thru KBJ410G

LITEON

FIG.1- FORWARD CURRENT DERATING CURVE

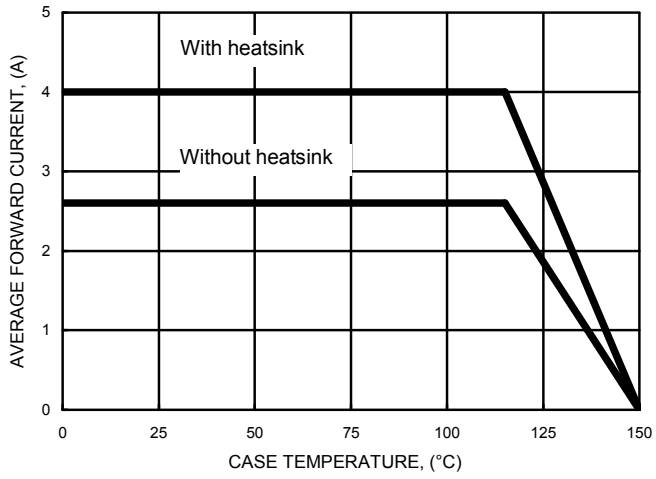


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

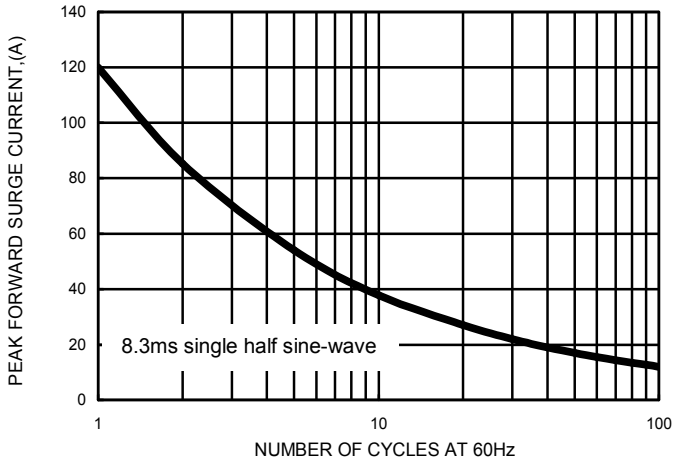


FIG.3- TYPICAL FORWORD CHARACTERISTICS

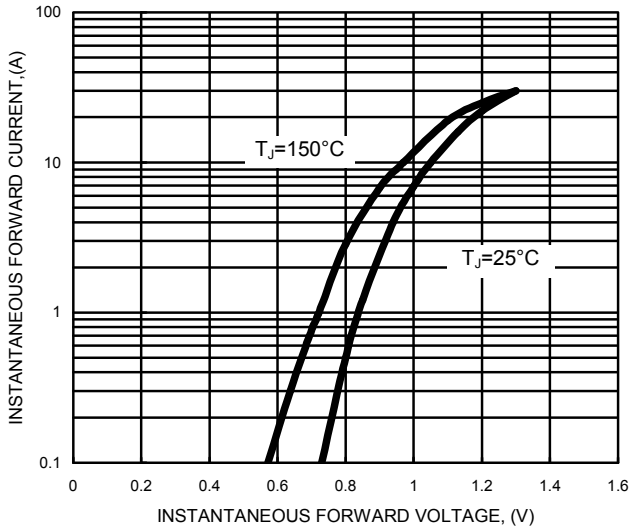


FIG.4- TYPICAL JUNCTION CAPACITANCE

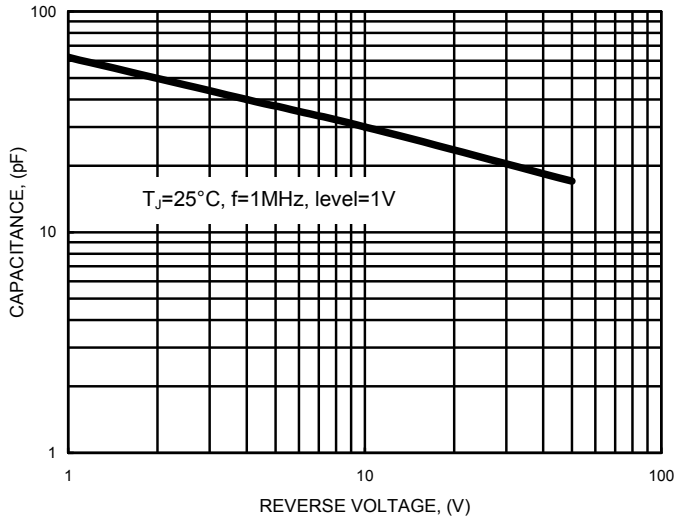


FIG.5- TYPICAL REVERSE CHARACTERISTICS

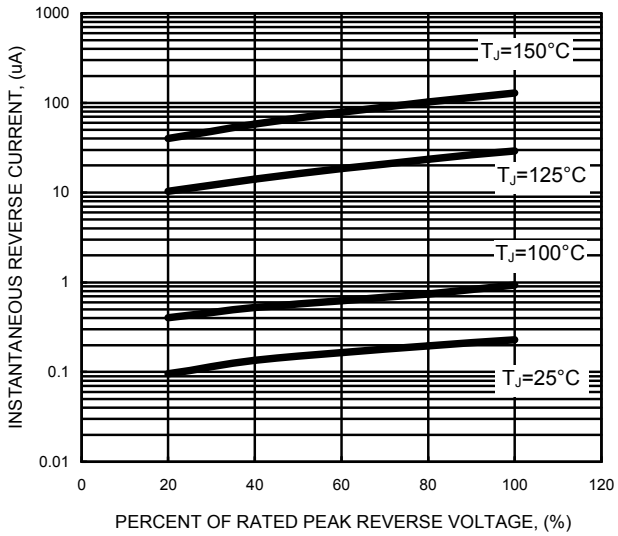


FIG.6- NON-REPETITIVE SURGE CURRENT

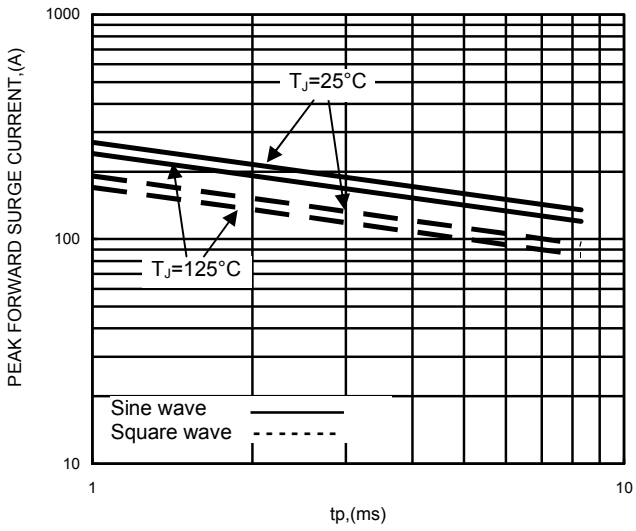
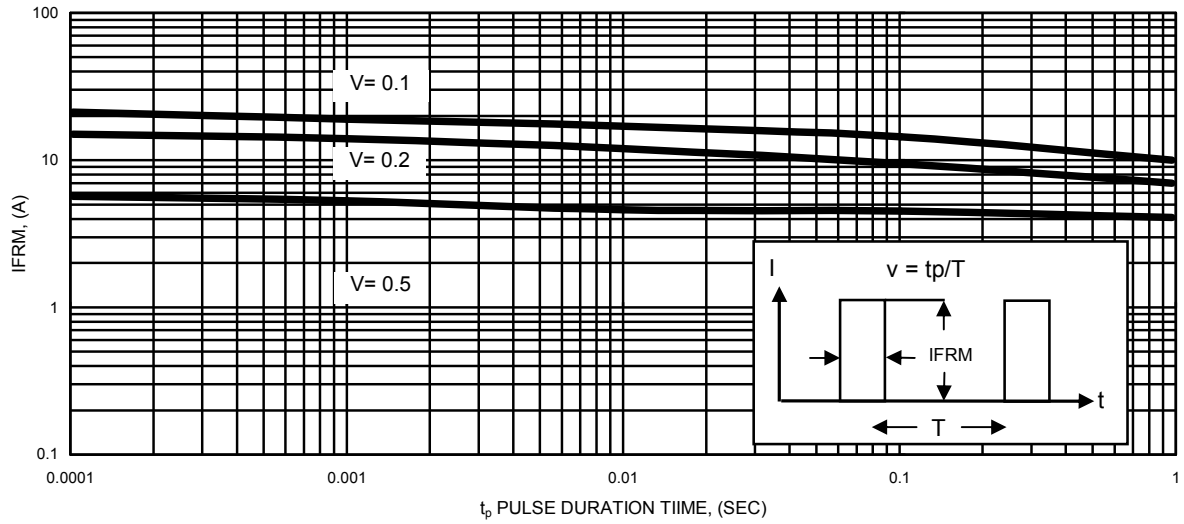


FIG.7- ADMISSIBLE REPETITIVE PEAK FORWARD CURRENT VS. PULSE DURATION



Important Notice and Disclaimer

LSC reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

LSC makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does LSC assume any liability for application assistance or customer product design. LSC does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of LSC.

LSC products are not authorized for use as critical components in life support devices or systems without express written approval of LSC.