LITE-ON SEMICONDUCTOR

KBPC25005G(W) thru 2510G(W)

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - **50** to **1000** Volts
FORWARD CURRENT - **25** Amperes

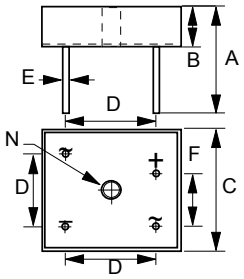
FEATURES

- Rating to 1000V PRV
- High efficiency
- Glass passivated chip junction
- Electrically isolated metal case for maximum heat dissipation
- UL recognized file # E95060

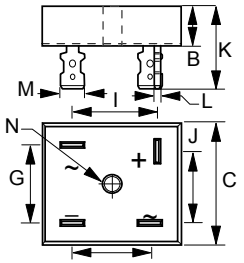
MECHANICAL DATA

- Case : Mounted in the bridge encapsulation
- Mounting : Hole for # 10 screw
- Poarity : As marked on case
- Weight : 0.85 ounces , 24.0 grams (terminal)
  : 0.74 ounces , 21.0 grams (wire)

KBPC-GW (Wire)



KBPC-G (Terminal)



KBPC-G/KBPC-GW		
DIM.	MIN.	MAX.
A	31.80	-
B	7.90	8.40
C	28.30	28.80
D	17.60	18.60
E	0.97	1.07
F	10.90	11.90
G	17.60	18.60
H	13.80	14.80
I	16.10	17.10
J	16.10	17.10
K	18.80	21.30
L	0.76	0.86
M	6.30	6.50
N	HOLE FOR NO. 10 SCREW	
	5.08	5.59
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	KBPC25 005G/W	KBPC25 01G/W	KBPC25 02G/W	KBPC25 04G/W	KBPC25 06G/W	KBPC25 08G/W	KBPC25 10G/W	UNIT
Maximum Recurrent 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_C =Ta	$I_{(AV)}$	25.0							A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load	I_{FSM}	350							A
Maximum forward Voltage at 12.5A DC	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T_J =25℃ / @T_J =125℃	I_R	5.0 / 500							uA
I^2t Rating for fusing (t < 8.3ms), (Note 1)	I^2t	508							A^2S
Typical Junction Capacitance per element (Note 2)	C_J	300							pF
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$	3.0							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

NOTES : 1.Measured at non-repetitive, for greater than 1ms and less than 8.3ms
2.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3.Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

REV. 4, Sep-2010, KBDI02

FIG.1 - FORWARD CURRENT DERATING CURVE

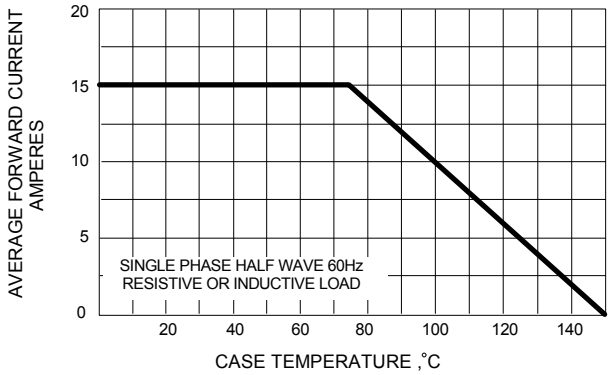


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

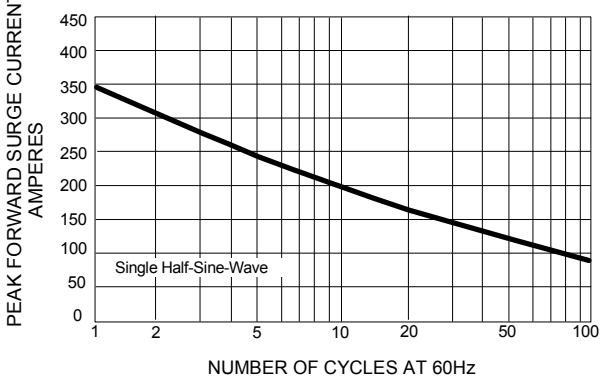


FIG.3 - TYPICAL JUNCTION CAPACITANCE

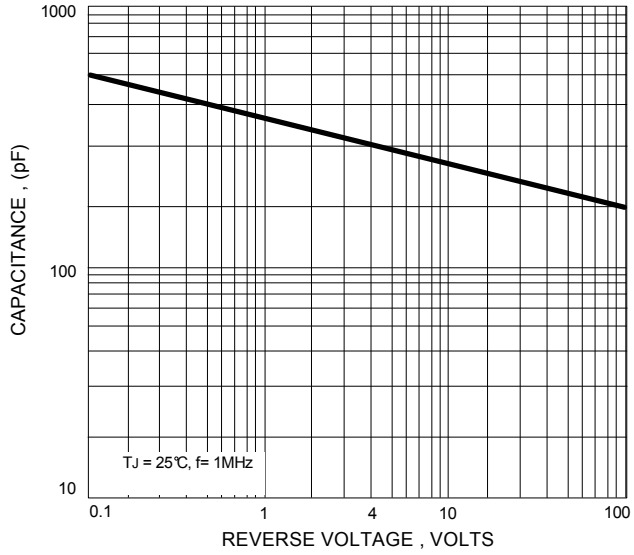


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

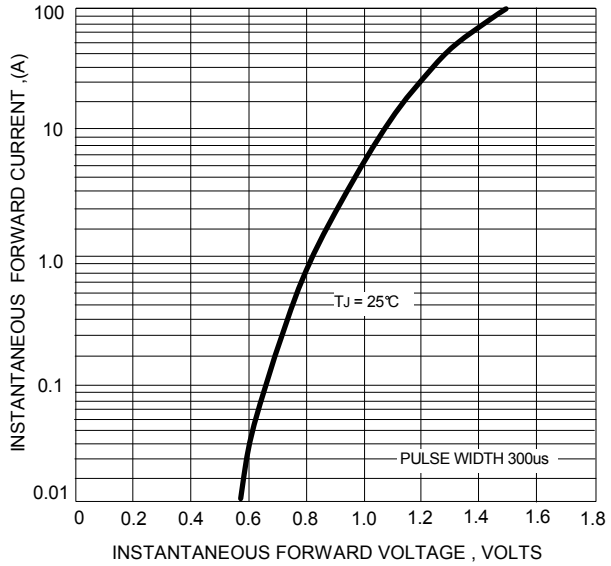
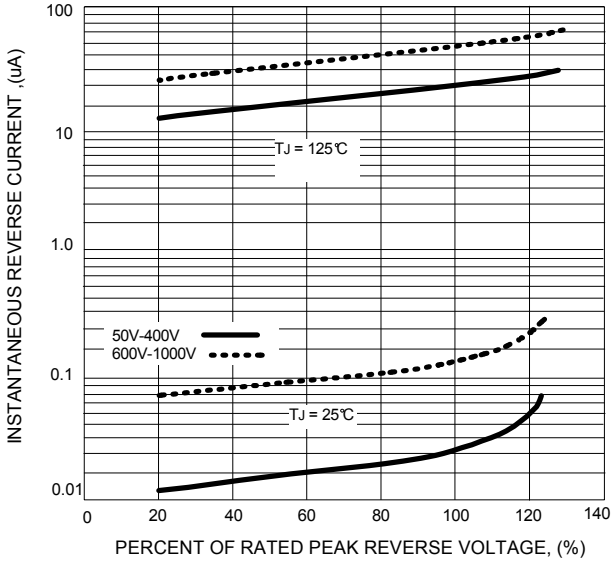


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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