

GLASS PASSIVATED BRIDGE RECTIFIERS

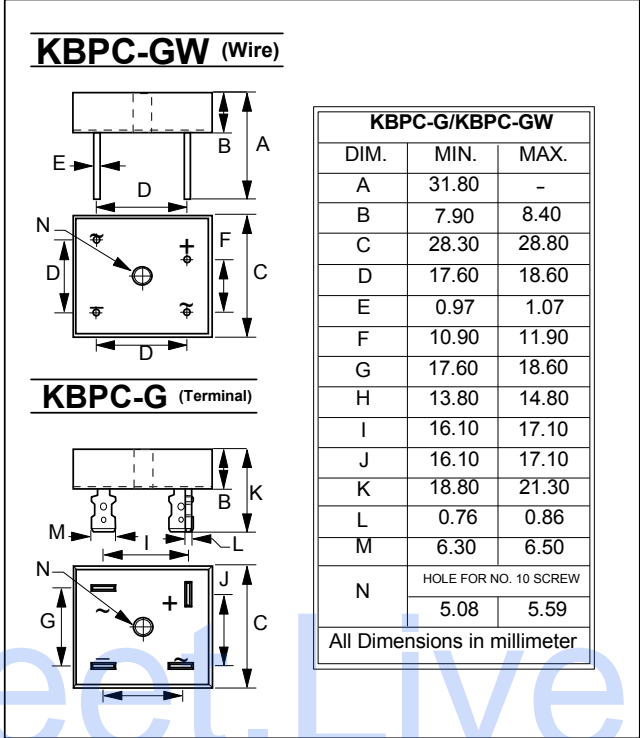
REVERSE VOLTAGE - **50 to 1000** Volts
FORWARD CURRENT - **25** Amperes

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
- Polarity : As marked on case
- Weight : 0.85 ounces , 24.0 grams (terminal)
: 0.74 ounces , 21.0 grams (wire)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	KBPC25005G/W	KBPC2501G/W	KBPC2502G/W	KBPC2504G/W	KBPC2506G/W	KBPC2508G/W	KBPC2510G/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 = T _a	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 @T _J = 25°C @T _J = 125°C	I _R	5.0 500							uA
I ² t Rating for fusing (t < 8.3ms), (Note 1)	I ² t	508							A ² S
Typical Junction Capacitance per element (Note 2)	C _J	300							pF
Typical Thermal Resistance (Note 3)	R _{θJC}	3.0							°C/W
Operating Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

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

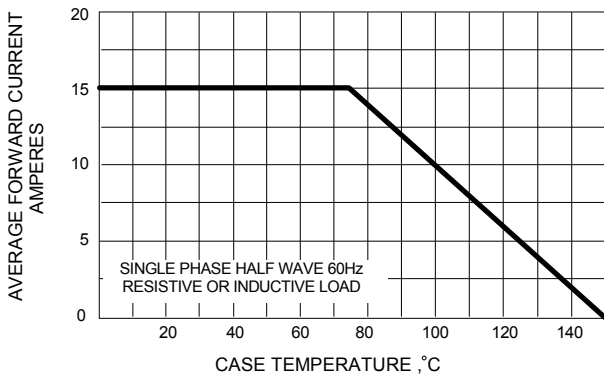


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

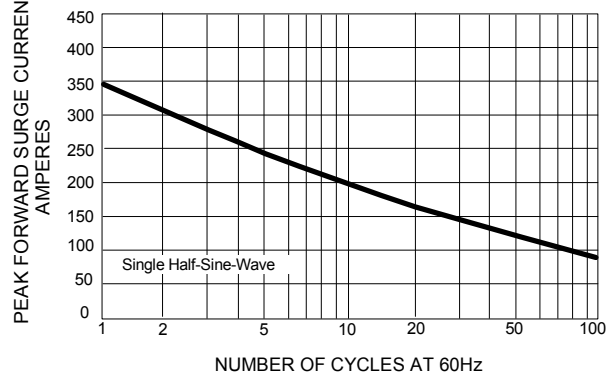


FIG.3 - TYPICAL JUNCTION CAPACITANCE

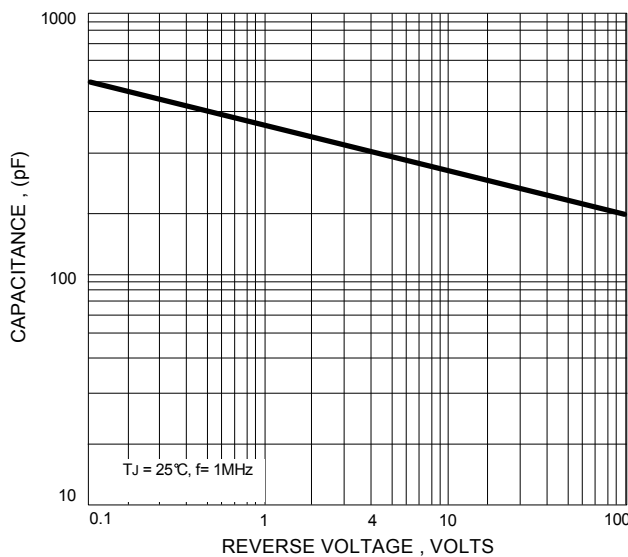


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

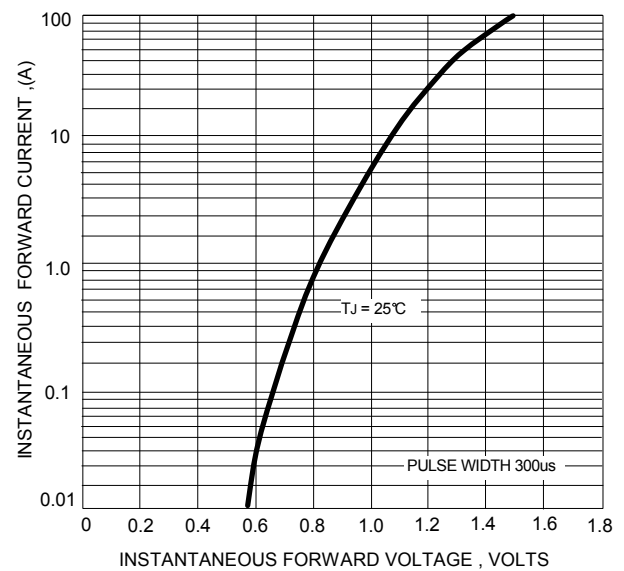
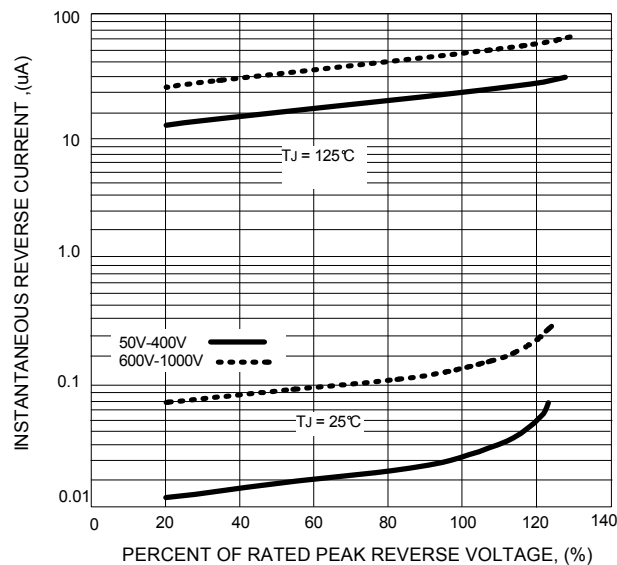


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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