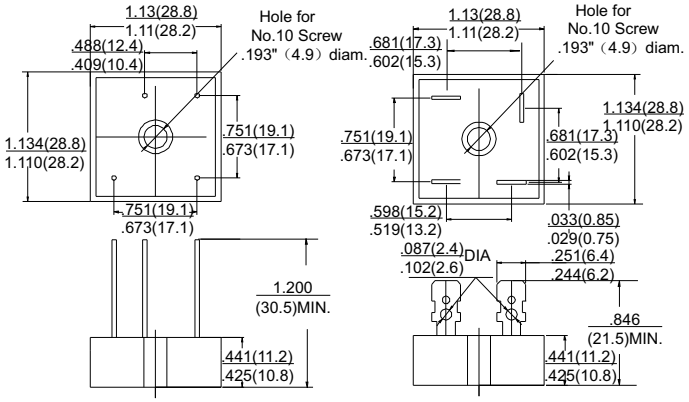
BRIDGE RECTIFIER
KBPC25005(W) Thru KBPC2510(W) 25.0 Amps

FEATURES

- UL Recognized
- Current 25 Amps
- Voltage Range 50V ~ 1000V
- Glass passivated chip junction
- High surge forward current capability
- KBPC available in 15A, 25A, 35A, 50A
- Electrically isolated metal case for maximum heat dissipation

METAL



Suffix W
(For Wire Leads)

No Suffix
(For 0.25" Terminals)

Dimensions in inches and millimeters

MECHANICAL DATA

- Mounted in the bridge encapsulation
- Mounting through hole for No. 10 screw
- Mounting Torque: recommend 5Kg • cm
- Polarity: As marked

MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

(T_A = 25°C Unless otherwise noted)

Parameter	Symbol	KBPC25 005	KBPC25 01	KBPC25 02	KBPC25 04	KBPC25 06	KBPC25 08	KBPC25 10	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 @ T_C = 55°C (With Heat Sink)	$I_{O\ (AV)}$	25							A
Peak Forward Surge Current 8.3ms single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	400							A
Forward Voltage (Per Element) @ I_F = 7.5A	V_{FM}	1.1							V
I^2t Rating for fusing (t < 8.3ms) (Note 1)	I^2t	375							A^2S
Dielectric Strength (AC 1 minute)	V_{dis}	2.5							KV
Maximum DC Reverse Current at rated DC Blocking Voltage	I_{RRM}	10							A
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.3							°C / W
Operating Temperature Range	T_J	-55 ~ +150							°C
Storage Temperature Range	T_{STG}	-55 ~ +150							°C

Note: 1. Measured at non-repetitive, for greater than 1ms and less than 8.3ms.
2. Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

RFE International • Tel:(949) 833-1988 • Fax:(949) 833-1788 • E-Mail Sales@rfeinc.com

2014.05.13

RATING & CHARACTERISTIC CURVES

FIG.1-MAXIMUM CURRENT DERATING CURVE

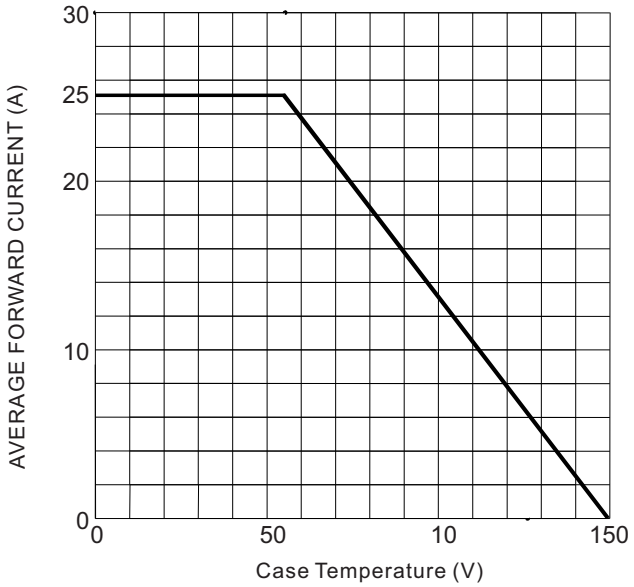


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

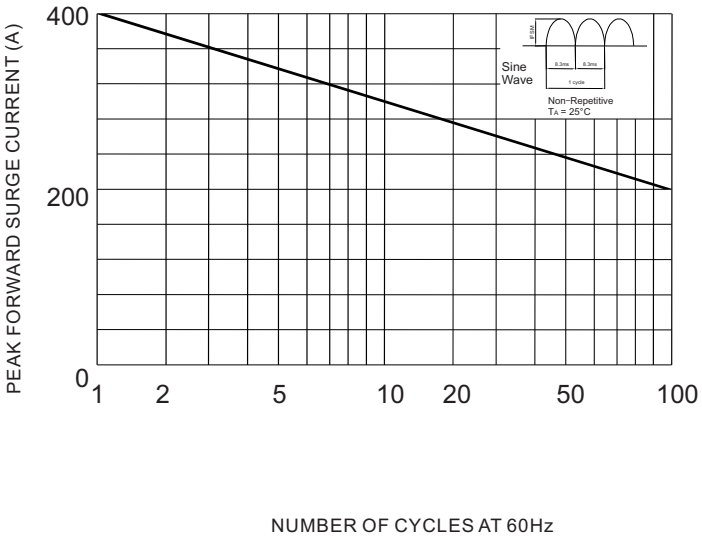


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

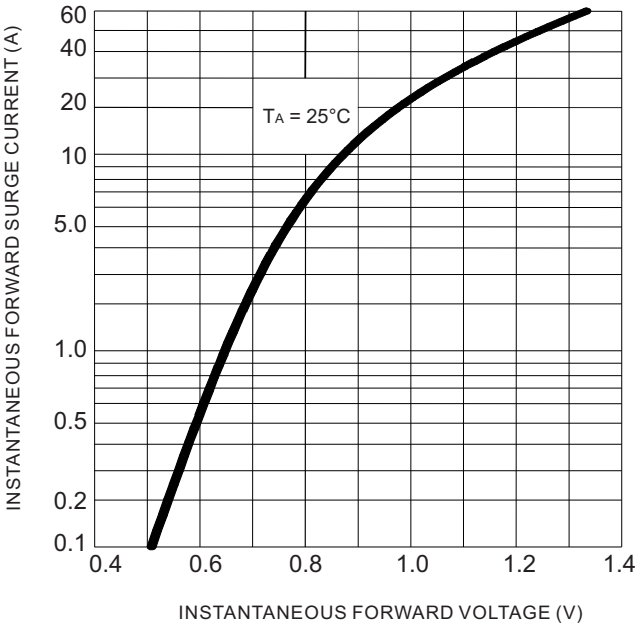
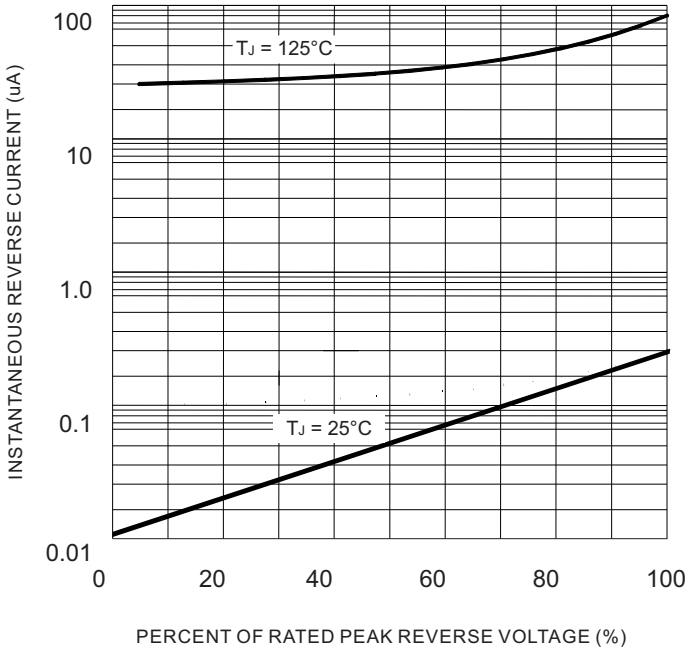


FIG.4-TYPICAL REVERSE CHARACTERISTICS



RFE International • Tel:(949) 833-1988 • Fax:(949) 833-1788 • E-Mail Sales@rfeinc.com

2014.05.13