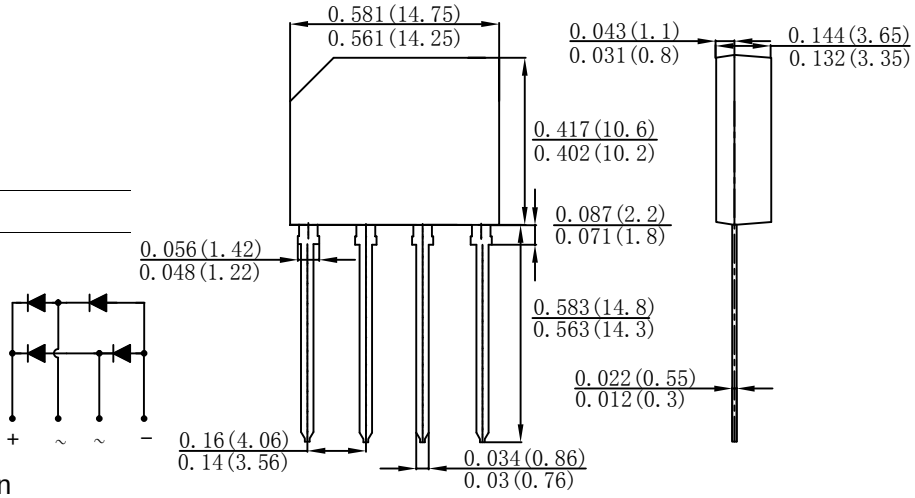
KBP4005G THRU KBP410G

SINGLE PHASE 4.0AMP GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0

KBP



Dimensions in inches and (millimeters)

Mechanical Data

- Case: KBP, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Marking: type number
- Lead Free: For RoHS / Lead Free Version

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.
Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	KBP 4005G	KBP 401G	KBP 402G	KBP 404G	KBP 406G	KBP 408G	KBP 410G	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current (With heatsink) @T_C=100℃ (Note 1) (Without heatsink)	$I_{F(AV)}$	4.0 2.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	120							A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	59.76							A^2s
Forward Voltage per element @IF=4.0A	V_{FM}	1.1							V
Peak Reverse Current @T_J=25℃ At Rated DC Blocking Voltage @T_J=125℃	I_R	5.0 200							uA
Typical Junction Capacitance (Note2)	Cj	30							pF
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JL}$	40 20							℃/W
Operating and Storage Temperature Range	T_J,T_{STG}	-55to+150							℃

Note:1. Mounted on glass epoxy PC board with 1.3mm^2 solder pad.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C..

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Fig. 1 Forward Current Derating Curve

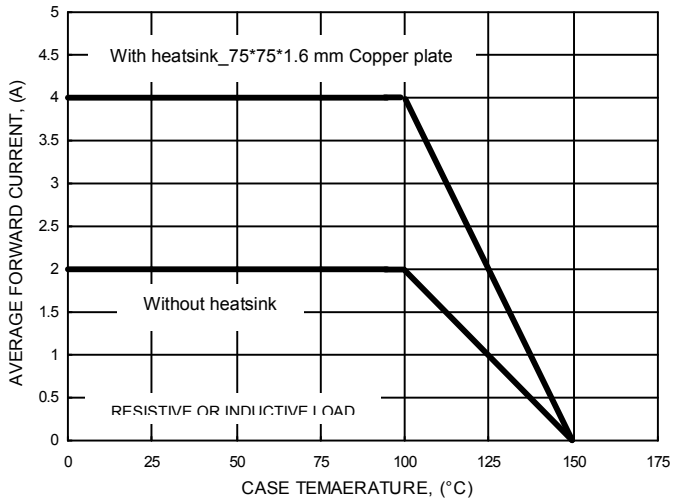


Fig. 2 Typical Fwd Characteristics

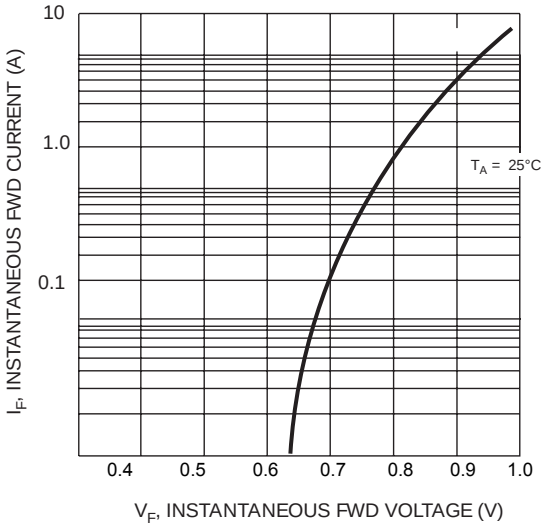


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

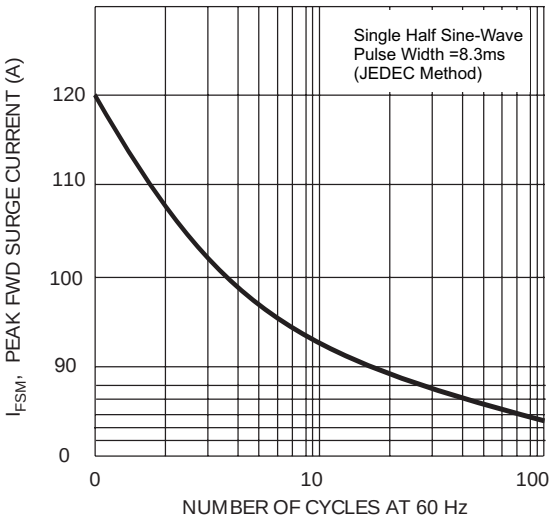


Fig. 4 Typical Junction Capacitance

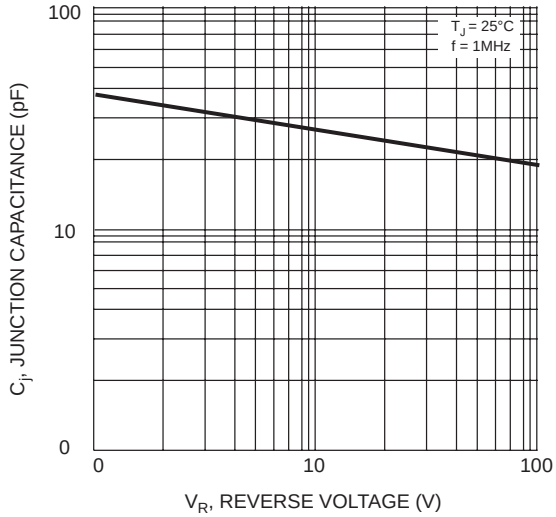
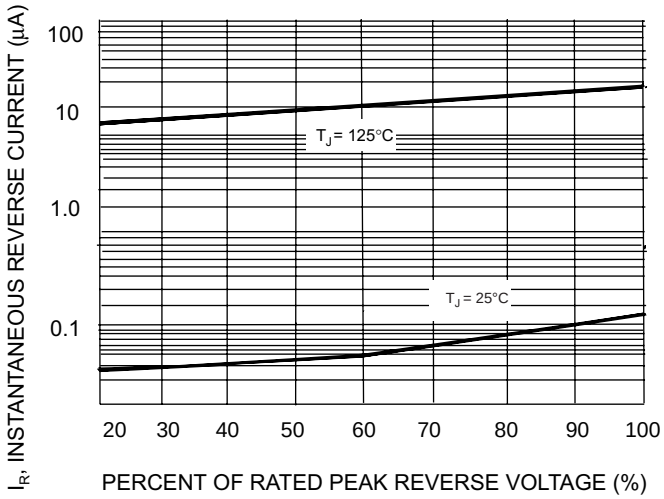


Fig. 5 T ypical Reverse Characteristics (per element)



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