



KBP4005G THRU KBP410G

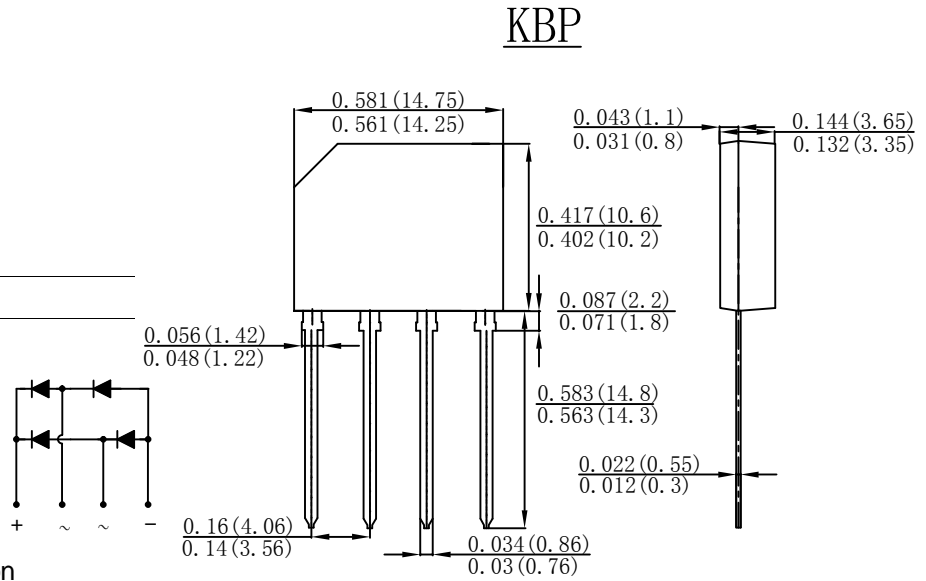
SINGLE PHASE 4.0AMP GLASS PASSIVATED BRIDGE RECTIFIER

Features

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

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°C 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}	50	100	200	400	600	800	1000	V	
	V _{RWM}									
	V _{DC}									
RMS Reverse Voltage	V _{RMS}	35	70	140	280	420	560	700	V	
Average Rectified Output Current (With heatsink) @T _c =100°C (Note 1)	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 ² t Rating for Fusing (t < 8.3ms)	I ² t	59.76								A ² s
Forward Voltage per element @I _F =4.0A	V _{FM}	1.1								V
Peak Reverse Current @T _J =25°C At Rated DC Blocking Voltage @T _J =125°C	I _R	5.0						200		uA
Typical Junction Capacitance (Note2)	C _j	30								pF
Typical Thermal Resistance	R _{θJA}	40								°C/W
	R _{θJL}	20								
Operating and Storage Temperature Range	T _J , T _{STG}	-55to+150								°C

Note:1. Mounted on glass epoxy PC board with 1.3mm² 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

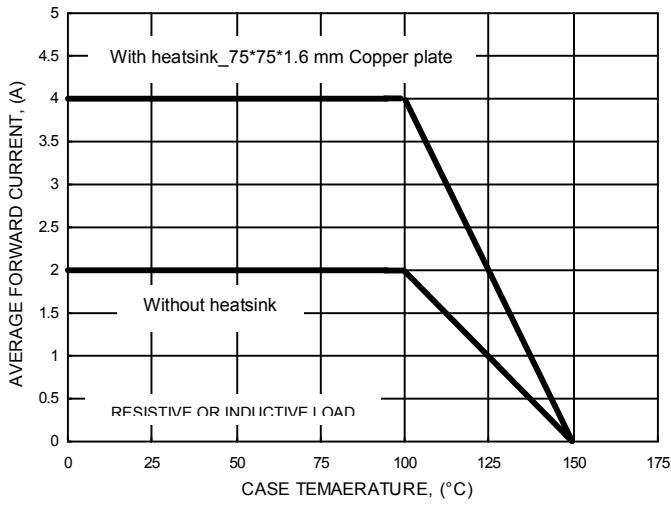


Fig. 2 Typical Fwd Characteristics

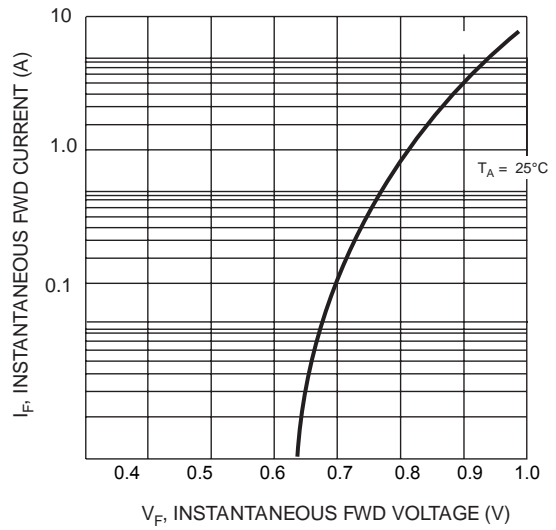


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

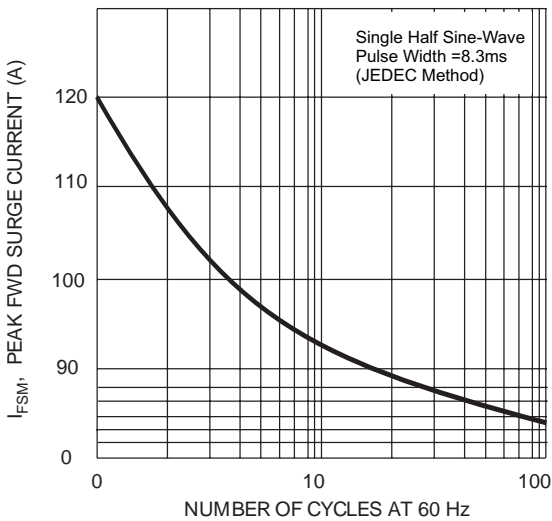


Fig. 4 Typical Junction Capacitance

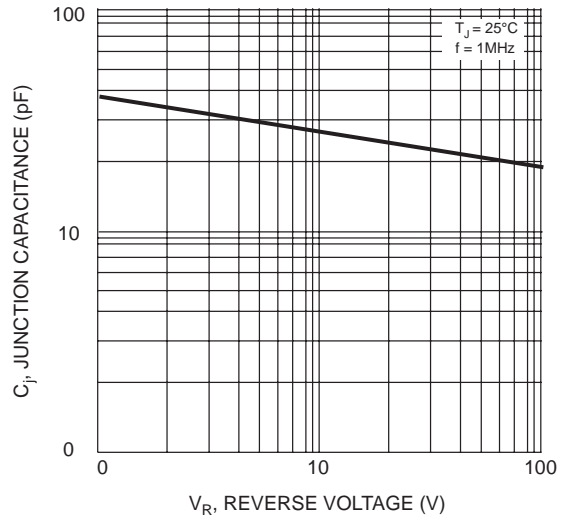
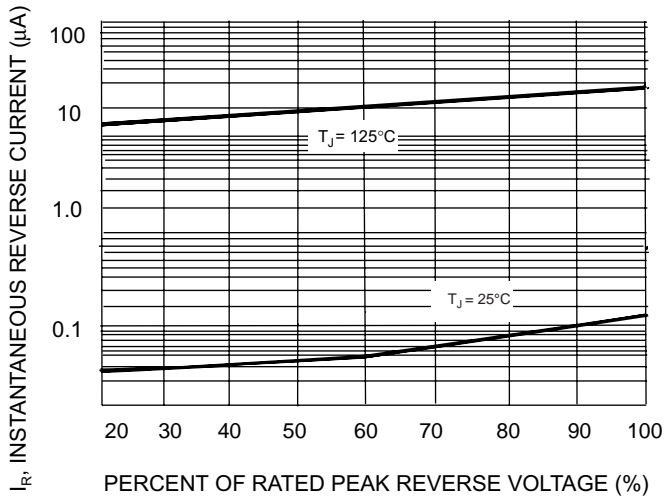


Fig. 5 Typical Reverse Characteristics (per element)





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