

CURRENT 4.0 Ampere  
 VOLTAGE RANG 50 to 1000 Volts

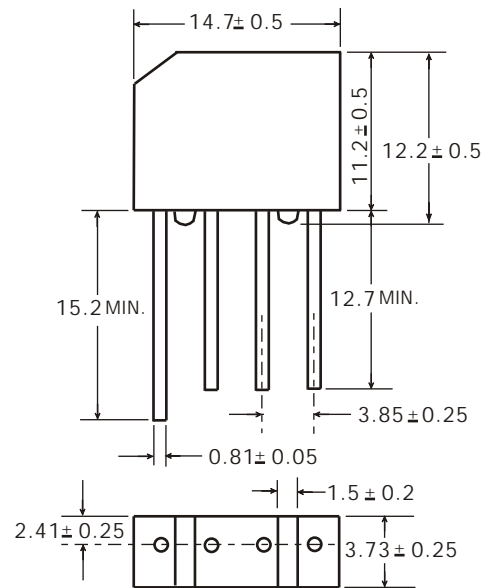
## KBP4005 THRU KBP410

### Features

- This series is SGS listed under the Recognized Component Index, file number SZXEC1902259902
- Ideal for printed circuit board mounting
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Built-in printed circuit board stand-offs
- High case dielectric strength
- High temperature soldering guaranteed 265°C/10 seconds at 5 lbs (2.3kg) tension

### Mechanical Data

Case: Reliable low cost construction utilizing molded plastic technique  
 Terminals: Plated leads solderable per MIL-STD-202, Method 208  
 Mounting Position: Any  
 Weight: 0.065 ounce, 2.2 grams (approx)



Dimensions in millimeters(1mm =0.0394")

### Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.  
 For Capacitive load derate current by 20%.

TYPE NUMBER	SYMBOL	KBP 4005	KBP 401	KBP 402	KBP 404	KBP 406	KBP 408	KBP 410	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	$V_{RWM}$								
DC Blocking Voltage	$V_{DC}$								
RMS Reverse Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ $T_A=50^\circ C$	$I_o$	4.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	80							A
Forward Voltage per element @ $I_F=4.0A$	$V_{FM}$	1.1							V
Peak Reverse Current @ $T_A=25^\circ C$ At Rated DC Blocking Voltage @ $T_A=125^\circ C$	$I_R$	5.0 500							$\mu A$
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JA}$	40							$^\circ C/W$
	$R_{\theta JL}$	20							
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55to+150							$^\circ C$

Notes: (1)Thermal resistance from Junction to Ambient on P.C.board mounting.  
 (2)Measured at 2.0MHz and applied reverse voltage of 4.0 volts.

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**Rating and Characteristic Curves** (  $T_A = 25^\circ\text{C}$  Unless otherwise noted )

Fig. 1 Forward Current Derating Curve

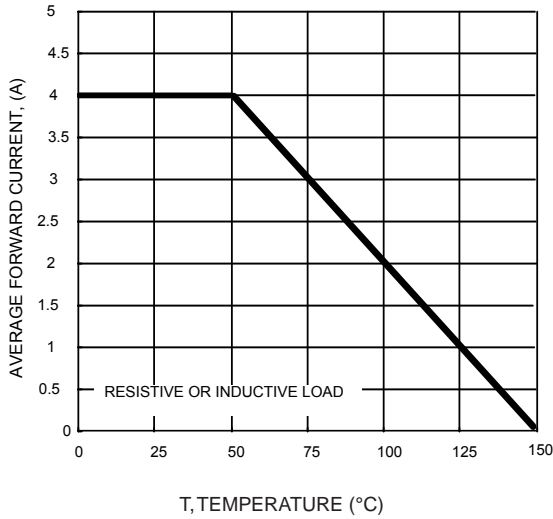


Fig. 2 Typical Fwd Characteristics

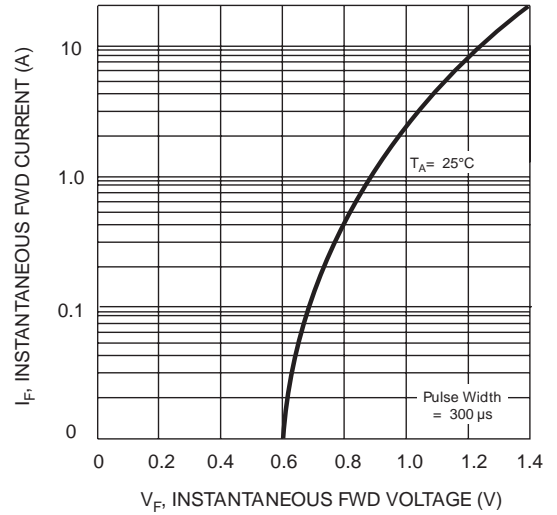


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

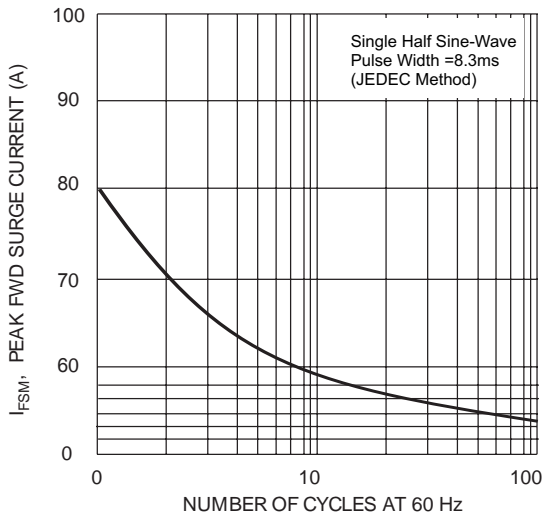


Fig. 4 Typical Junction Capacitance

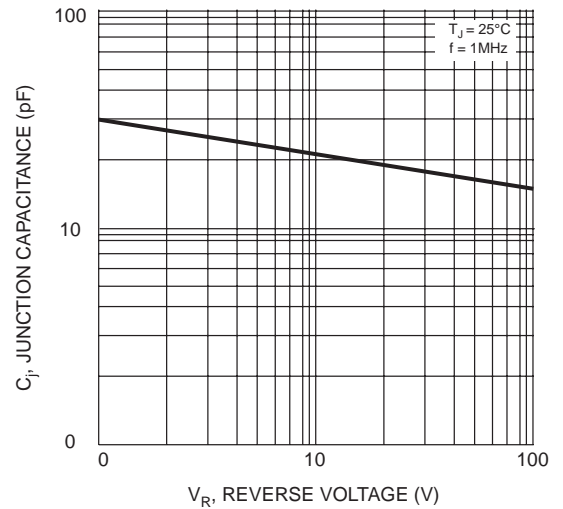


Fig. 5 T typical Reverse Characteristics (per element)

