

CURRENT 3.0 Ampere
VOLTAGE RANG 50 to 1000 Volts

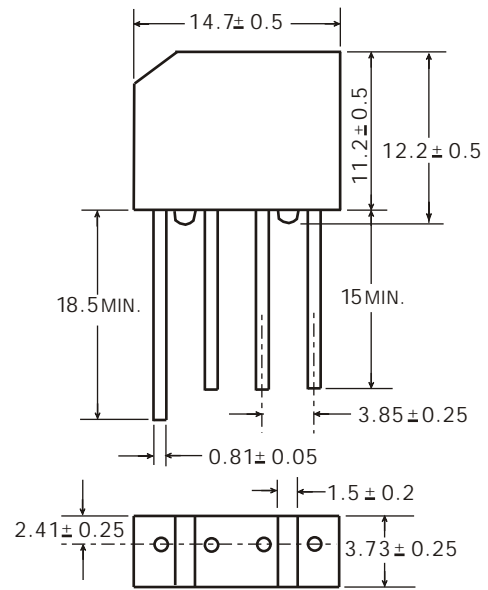
KBP301 THRU KBP307

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: 0.053 ounce, 1.5 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%.

Parameter	Symbol	KBP301	KBP302	KBP303	KBP304	KBP305	KBP306	KBP307	unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at TA=50°C	IF(AV)				3.0				A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM				50				A
Rating for fusing (t < 8.3ms)	I ² t				10				A ² sec
Typical thermal resistance per element (1)	ReJA				50.0				°C / W
Typical junction capacitance per element (2)	Cj				24				pF
Operating junction and storage temperature range	TJ, TSTG				-55 to + 150				°C

Electrical Characteristics

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

Parameter	Symbol	KBP301	KBP302	KBP303	KBP304	KBP305	KBP306	KBP307	Unit
Maximum instantaneous forward voltage drop per leg at 1.5A	VF				1.1				V
Maximum DC reverse current at rated DC blocking voltage per element	IR				10 500				μA

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 (TA=25°C Unless otherwise noted)

Fig. 1 Derating Curve for Output Rectified Current

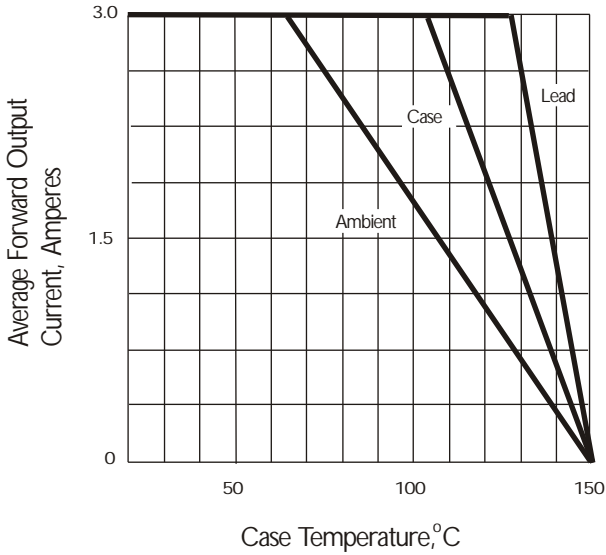


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

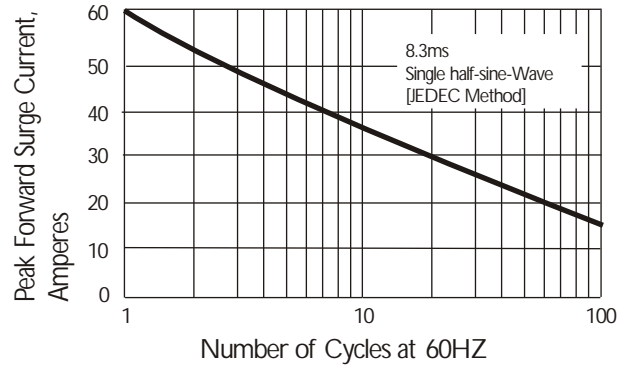


Fig. 3 Typical Instantaneous Forward Characteristics

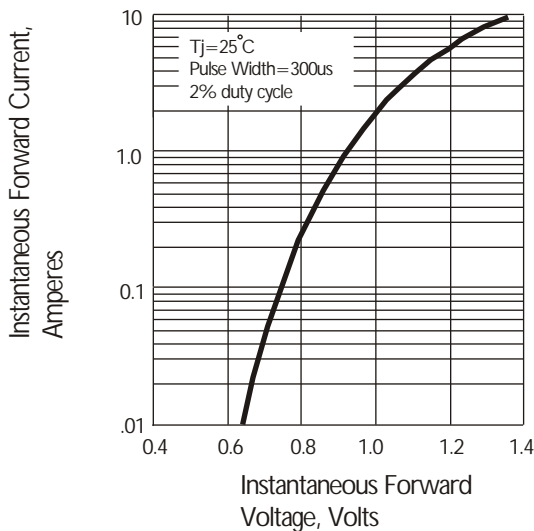


Fig. 4 Typical Reverse Characteristics

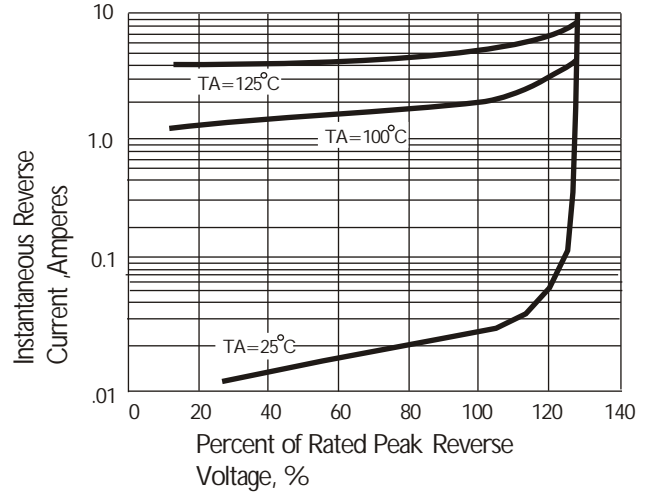


Fig. 5 Typical Junction Capacitance

