

CURRENT 10.0 Ampere
VOLTAGE RANG 50 to 1000 Volts

KBPC1001 THRU KBPC1010

Features

- This series is SGS listed under the Recognized Component Index, file number SZXEC1902259902
- High temperature metallurgically bonded internal rectifiers
- Typical I_R less than $.1\mu A$
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- High temperature soldering guaranteed 265 °C/10 seconds at 5 lbs (2.3kg) tension

Mechanical Data

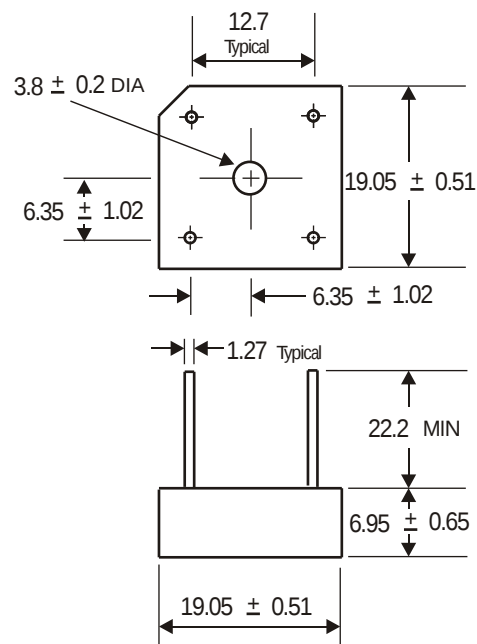
Case: Voil-free plastic package

Terminals: Plated leads solderable per MIL-STD-202, Method 208

Mounting: Thru hole for #6 screw

Mounting position: Any

Weight: 0.24 ounce, 6.9 grams (approx)



Dimensions in millimeters(1mm =0.0394")

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristic	Symbol	KBPC 1000	KBPC 1001	KBPC 1002	KBPC 1004	KBPC 1006	KBPC 1008	KBPC 1010	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V _{RWM}								
DC Blocking Voltage	V _R								
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current @T _A = 50°C	I _O	10							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	200							A
Forward Voltage (per element) @I _F = 5.0A	V _{FM}	1.1							V
Peak Reverse Current @T _C = 25°C	I _{RM}	10							μA
At Rated DC Blocking Voltage @T _C = 125°C		1.0							mA
Typical Junction Capacitance (Note 1)	C _j	300							pF
Typical Thermal Resistance (Note 2)	R _{θJC}	6.3							K/W
RMS Isolation Voltage from Case to Lead	V _{ISO}	2500							V
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150							°C

* Glass passivated forms are available upon request.

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance junction to case per element mounted on heatsink.

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

Fig. 1 Derating Curve for Output Rectified Current

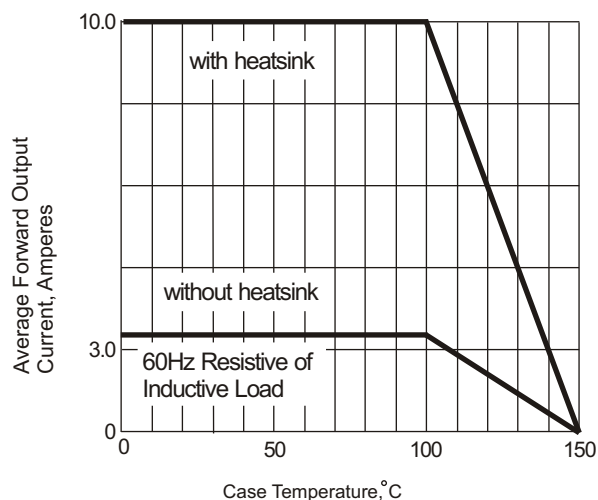


Fig. 2 Typical Forward Characteristics (per element)

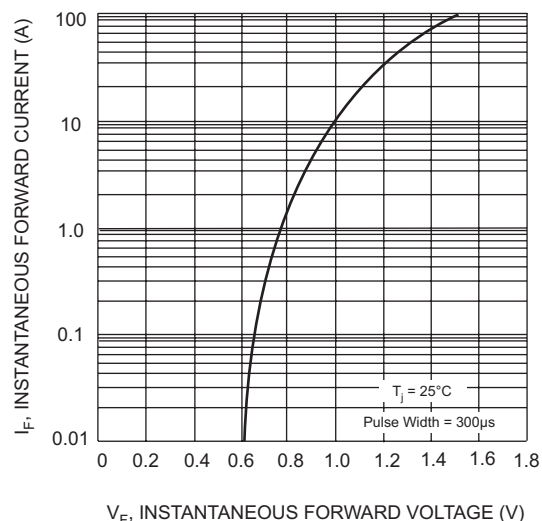


Fig. 3 Max Non-Repetitive Surge Current

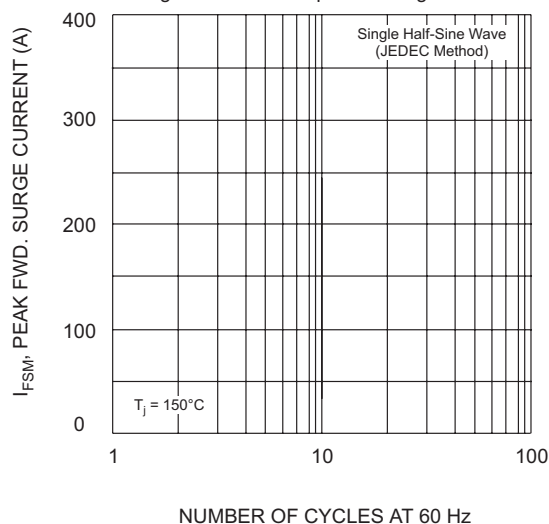


Fig. 4 Typical Junction Capacitance (per element)

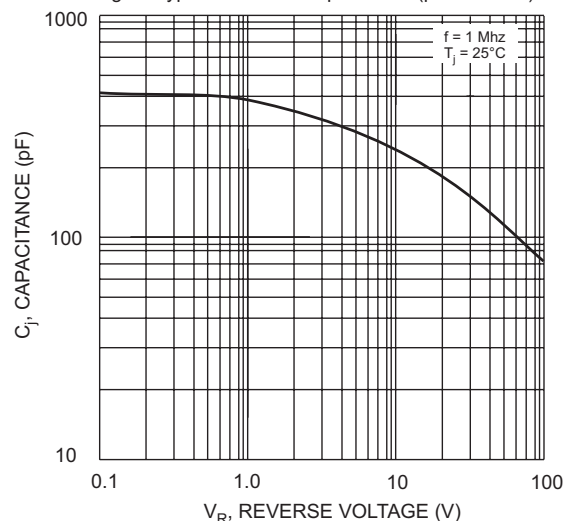


Fig. 5 Typical Reverse Characteristics (per element)

