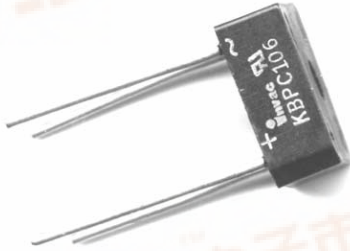




KBPC100 SERIES

3.0 AMPERE SINGLE-PHASE SILICON BRIDGE RECTIFIER



FEATURES

- Plastic material has Underwriters Laboratory flammability classification 94V-0.
- Low leakage.
- Surge overload rating - 50 amperes peak.
- Ideal for printed circuit boards.
- Exceeds environmental standards of MIL - STD - 19500.

MECHANICAL DATA

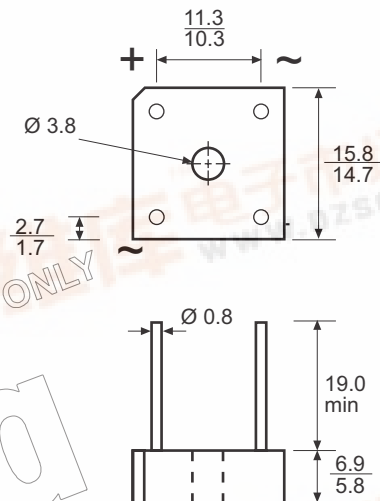
- Case** : Reliable low cost construction utilizing moulded plastic technique results in inexpensive product.
- Terminals**: Leads, solderable per MIL - STD - 202, Method 208.
- Polarity** : Polarity symbols printed on body.
- Weight** : 0.13 ounce, 3.8 grams.

VOLTAGE RANGE

50 to 1000 Volts

CURRENT

3 Amperes



Dimensions in millimetres

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

		KBPC1005	KBPC101	KBPC102	KBPC103	KBPC104	KBPC106	KBPC108	KBPC110	
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	300	400	600	800	1000	V
Maximum Bridge Input Voltage RMS	VRMS	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Current at (see Fig 2)	T _C = 50°C* T _A = 50°C**	3.0 2.0								A
Peak Forward Surge Current, 8.3 ms single half sine - wave super-imposed on rated load (see Fig 1)	I _{FSM}	50								A
Maximum Forward Voltage Drop per Element at 1.5A DC (see Fig 3)	V _F	1.2								V
Maximum Reverse Current at Rated DC Blocking Voltage per Element (see Fig 4)	T _A = 25°C T _A = 100°C	10.0 1.0								μA mA
Operating Temperature Range	T _J	- 55 to + 125								°C
Storage Temperature Range	T _{STG}	- 55 to + 150								°C

Notes * Unit mounted on metal heatsink.
** Unit mounted on P.C board.

RATING AND CHARACTERISTIC CURVES
KBPC100 SERIES

FIG 1 : MAXIMUM NON-REPETITIVE SURGE CURRENT PER ELEMENT

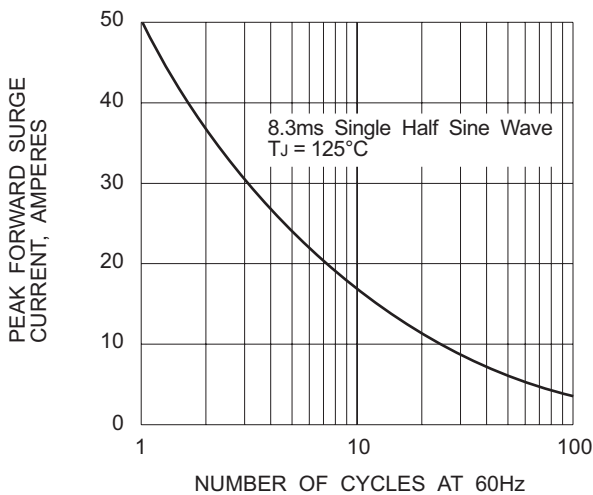


FIG 2 : DERATING CURVE FOR RECTIFIED OUTPUT CURRENT

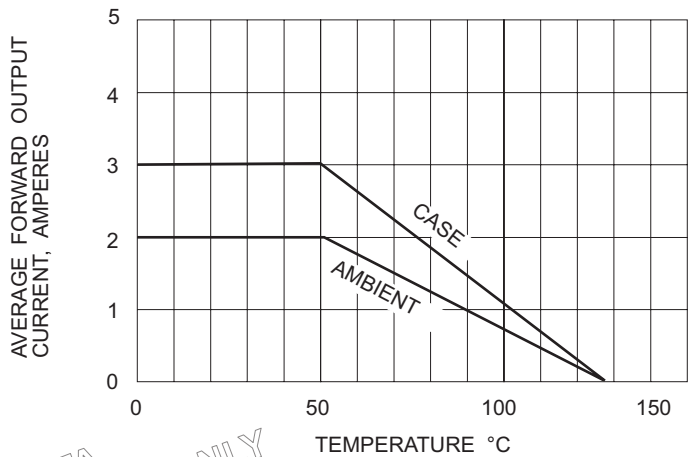


FIG 3 : TYPICAL FORWARD CHARACTERISTICS PER ELEMENT

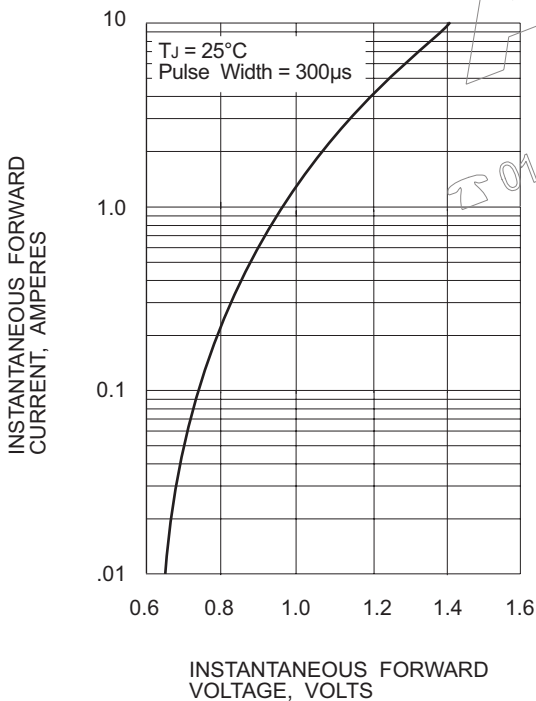


FIG 4 : TYPICAL REVERSE CHARACTERISTICS PER ELEMENT

