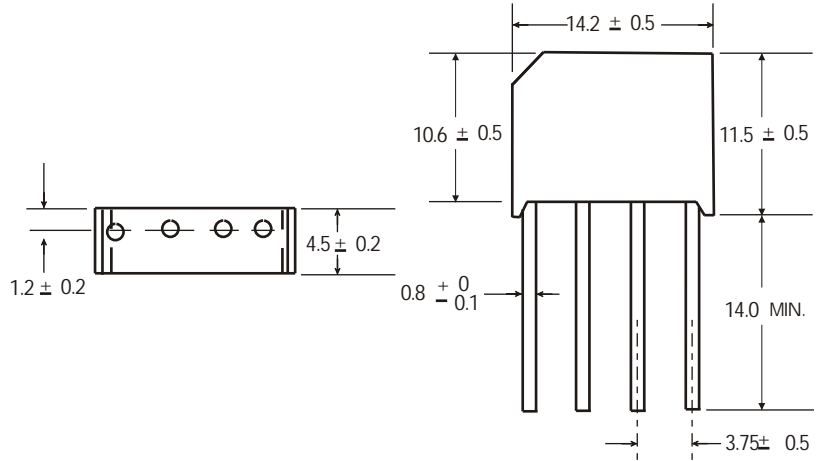


2.0 Amp SINGLE PHASE SILICON BRIDGE

Mechanical Dimensions

KBP200~210



KBP

Dimensions in millimeters

Features

- ★ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ★ High surge current capability
- ★ Ideal for printed circuit boards

Mechanical Data

- ★ Case: Molded plastic body over passivated junctions
- ★ Terminals: Solderable per MIL-STD-202, method 208
- ★ Polarity: As marked on body
- ★ Mounting position: Any
- ★ Weight: 0.06 ounce, 1.7 grams

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%.

	SYMBOL	KBP200	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current T _A =50°C	I _(AV)	2.0							A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	60							A
Maximum Instantaneous Forward Voltage @ 2.0 A	V _F	1.1							V
Maximum DC Reverse Current @ T _J =25°C At Rated DC Blocking Voltage @ T _J =125°C	I _R	10.0 1.0							uA mA
Rating for fusing (t < 8.3ms)	I ² t	15							A ² S
Typical junction Capacitance (Note 1)	C _J	25							pF
Typical Thermal Resistance per leg Typical Thermal Resistance (Note 2)	R _{θJA} R _{θJL}	32 11							°C/W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to + 165							°C

NOTES : (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.
(2) Thermal Resistance from junction to ambient mounted on P.C.B with 0.5 x 0.5"(13x13mm) copper pads.

Fig. 1 Derating Curve for Output Rectified Current

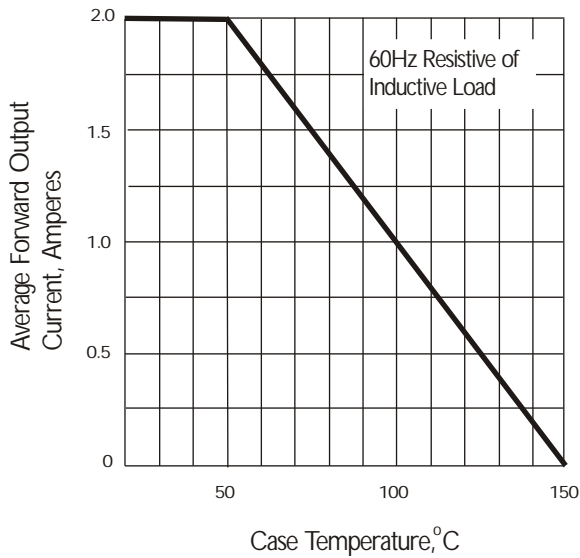


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

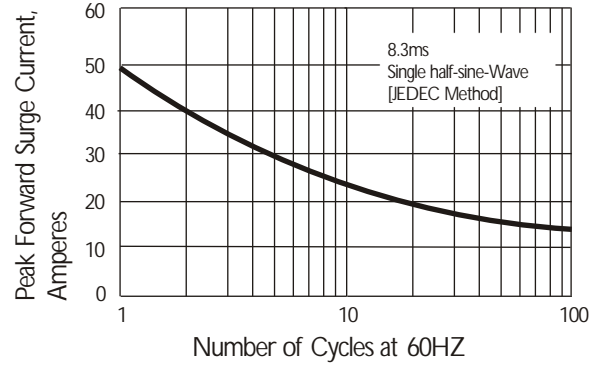


Fig. 3 Typical Instantaneous Forward Characteristics

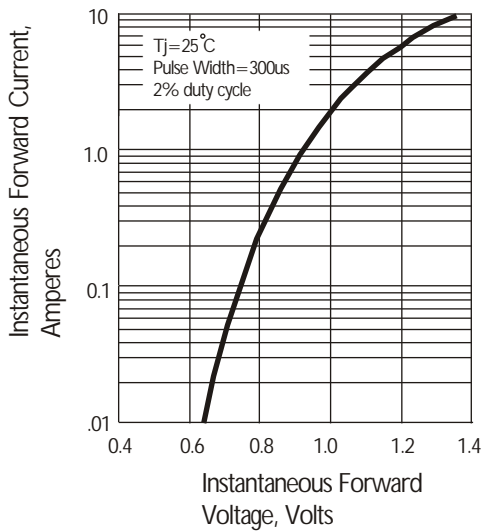


Fig. 4 Typical Reverse Characteristics

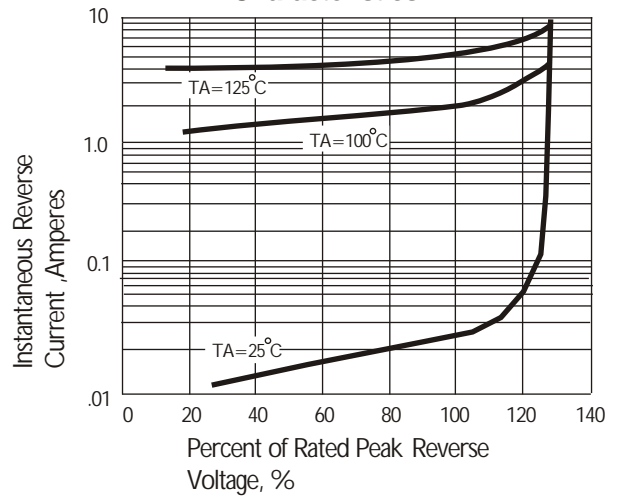


Fig. 5 Typical Junction Capacitance

