



KBP005 THRU KBP10

SINGLE-PHASE SILICON BRIDGE

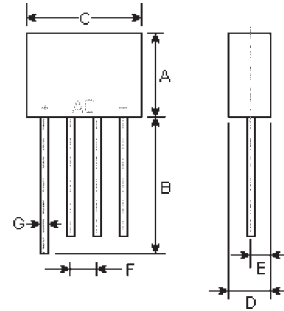
Reverse Voltage - 50 to 1000 Volts

Forward Current - 2.0 Amperes

Features

- Surge overload rating - 50 amperes peak
- Ideal for printed circuit board
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- Mounting Position: Any
- Lead: Silver plated copper lead

RS-2



DIMENSIONS					Note
DIM	inches		mm		
	Min.	Max.	Min.	Max.	
A	-	0.504	-	12.8	
B	0.75	-	19.0	-	
C	-	0.693	-	17.6	
D	-	0.25	-	6.4	
E	-	0.125	-	3.2	
F	-	0.15	-	3.8	
G	0.32 Typ.		0.8 Typ.		φ

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

For capacitive load, derate current by 20%.

	Symbols	KBP005	KBP01	KBP02	KBP04	KBP06	KBP08	KBP10	Units
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS bridge input voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified output current at $T_A=50^\circ\text{C}$	$I_{(AV)}$	2.0							Amps
Peak forward surge current, 8.3mS single half sine-wave superimposed on rated load	I_{FSM}	50.0							Amps
Maximum forward Voltage drop per bridge element at 1.0A peak	V_F	1.0							Volt
Maximum DC reverse current at rated DC blocking voltage per element	I_R	10.0							μA
Maximum DC reverse current at rated DC blocking voltage per element $T_A=100^\circ\text{C}$	I_R	1.0							mA
Operating temperature range	T_J	-55 to +125							$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150							$^\circ\text{C}$

RATINGS AND CHARACTERISTIC CURVES

Fig. 1 – DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

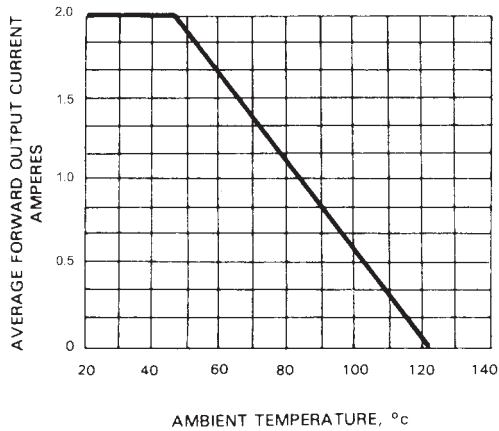


Fig. 2 – DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

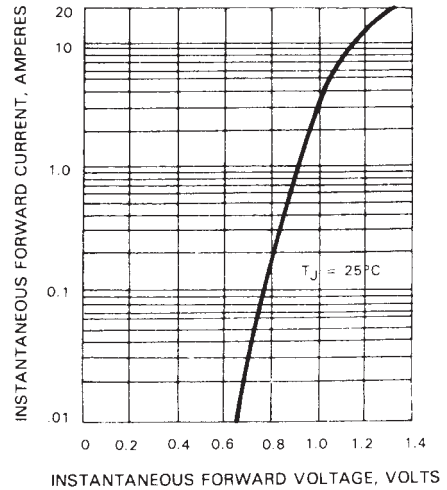


Fig. 3 – TYPICAL FORWARD
CHARACTERISTICS

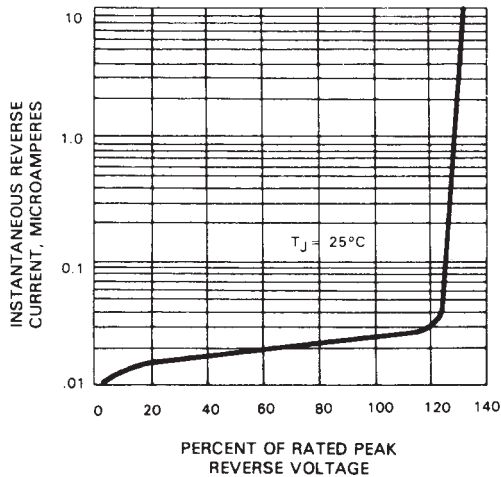


Fig. 4 – MAXIMUM FORWARD SURGE CURRENT

