

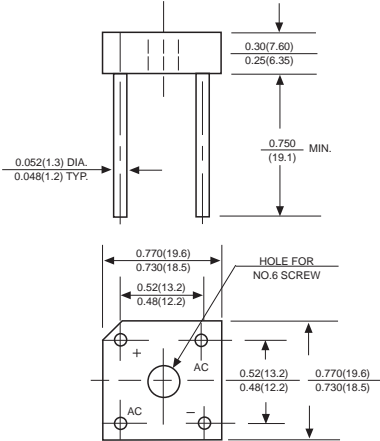


KBPC1005 THRU KBPC1010

SILICON BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 10.0 Amperes

BR-8



Dimensions in inches and (millimeters)

FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Ideal for printed circuit boards
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 260°C/10 seconds, at 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: Molded plastic body

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

Polarity: Polarity symbols marked on case

Mounting: Thru hole for #6 serew, 5in.-lbs. torque max.

Weight: 0.20 ounce, 5.62 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

MDD Catalog Number	SYMBOLS	KBPC 10005	KBPC 1001	KBPC 1002	KBPC 1004	KBPC 1006	KBPC 1008	KBPC 1010	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS 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 output current at	I_{AV}	$T_C=50^\circ C$ (Note 1)		10.0					Amps
		$T_C=100^\circ C$ (Note 1)		8.0					
		$T_A=50^\circ C$ (Note 2)		8.0					
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150.0					Amps		
Rating for Fusing ($t < 8.3ms$)	$I^2 t$	64					A ² s		
Maximum instantaneous forward voltage drop per bridge element at 5.0A	V_F	1.1					Volts		
Maximum DC reverse current at rated DC blocking voltage	I_R	$T_A=25^\circ C$		10					μA
		$T_A=100^\circ C$		1.0					mA
Isolation voltage from case to leads	V_{ISO}	2500					V_{AC}		
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	6.0					°C/W		
Operating junction temperature range	T_J	-55 to +125					°C		
storage temperature range	T_{STG}	-55 to +150					°C		

NOTES:

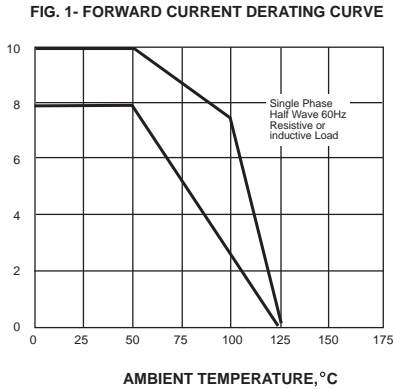
1. Unit mounted on 8.7" x 8.7" x 0.24" thick (22x22x0.6cm) Al. plate.

2. Unit mounted on P.C. board with 0.47" x 0.47" (12x12mm) copper pads, 0.375" (9.5mm) lead length.

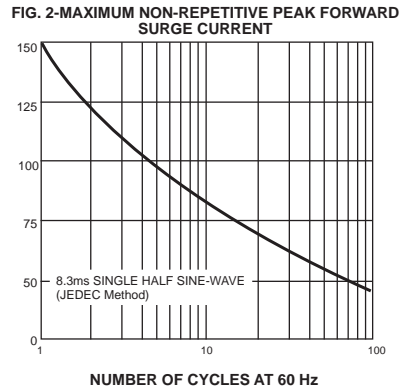


RATINGS AND CHARACTERISTIC CURVES KBPC10005 THRU KBPC1010

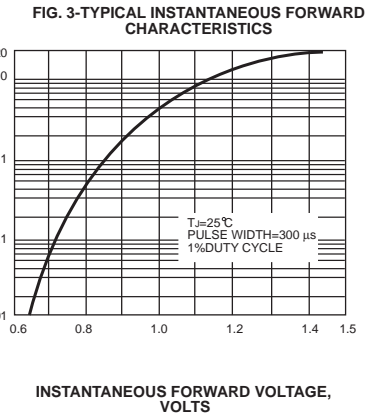
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES



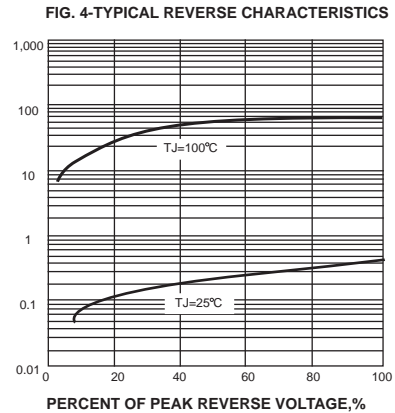
PEAK FORWARD SURGE CURRENT,
AMPERES



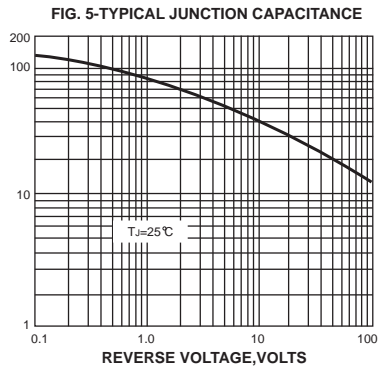
INSTANTANEOUS FORWARD
CURRENT, AMPERES



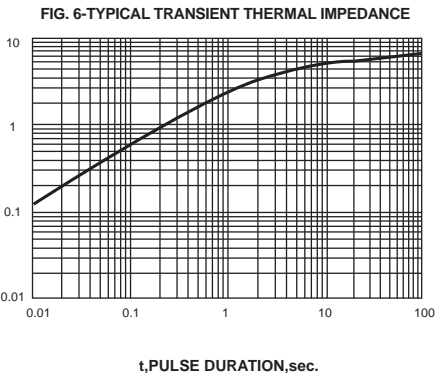
INSTANTANEOUS REVERSE CURRENT,
MICROAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE,
°C/W



The cruve graph is for reference only, can't be the basis for judgment()!



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