



KBPC6005 THRU KBPC610

Reverse Voltage - 50 to 1000 Volts Forward Current - 6.0 Amperes

SILICON BRIDGE RECTIFIERS

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, 5 lbs. (2.3kg) tension

Mechanical Data

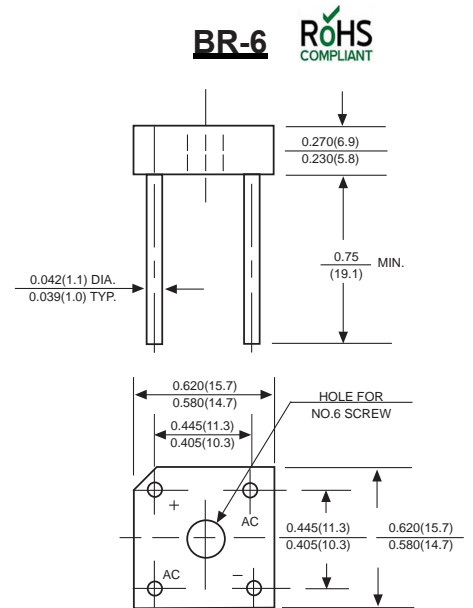
Case : JEDEC BR-6 Molded plastic body

Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

Polarity : Polarity symbol marking on body

Mounting Position : Any

Weight : 0.13 ounce, 3.66 grams



Dimensions in inches and (millimeters)

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%.

Parameter	SYMBOLS	KBPC 6005	KBPC 601	KBPC 602	KBPC 604	KBPC 606	KBPC 608	KBPC 610	UNITS	
		MDD KBPC 6005	MDD KBPC 601	MDD KBPC 602	MDD KBPC 604	MDD KBPC 606	MDD KBPC 608	MDD KBPC 610		
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS voltage	V_{RMS}	30	70	140	280	420	560	700	V	
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V	
Maximum average forward output rectified current at $T_A=50^\circ\text{C}$ (Note 1) and $T_A=25^\circ\text{C}$ (Note 2)	I_{AV}	6.0						3.0		A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	125								A
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	64								A ² s
Maximum instantaneous forward voltage drop per bridge element at 3.0A	V_F	1.0								V
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ and $T_A=100^\circ\text{C}$	I_R	10						1.0		μA mA
Typical Junction Capacitance (Note 1)	C_J	60								pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	8.0								$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J	-55 to +125								$^\circ\text{C}$
storage temperature range	T_{STG}	-55 to +150								$^\circ\text{C}$

NOTES:

1. Unit mounted on 6.0" x 5.5" x 0.11" thick (15x14x0.3cm) Al. plate.

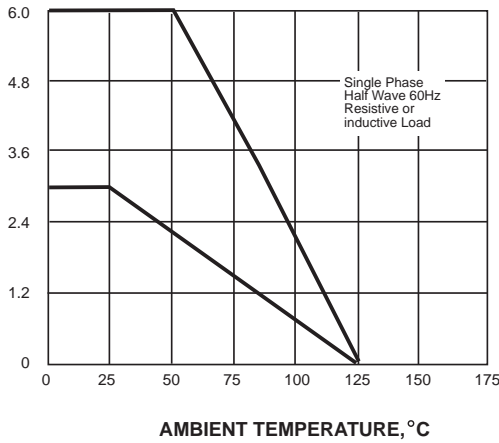
2. Unit mounted on P.C. board with 0.47" x 0.47" (12x12mm) copper pads, 0.375" (9.5mm) lead length.



Ratings And Characteristic Curves

AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



PEAK FORWARD SURGE CURRENT, AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

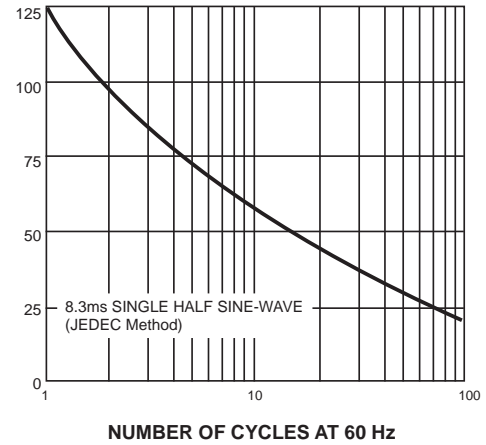
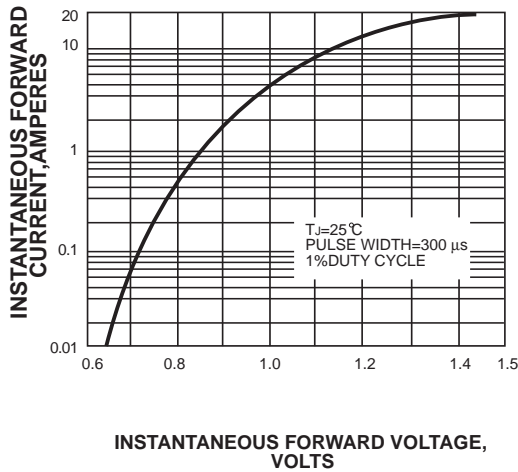


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT, MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

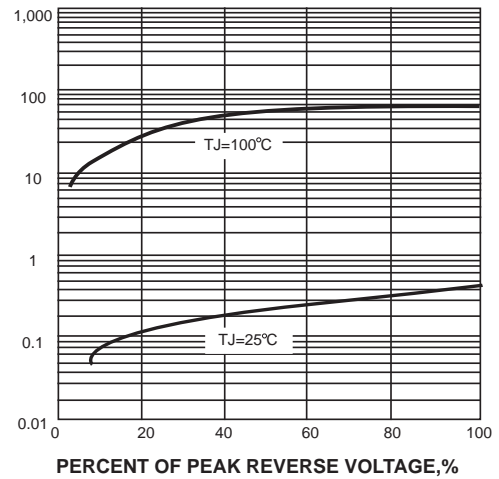
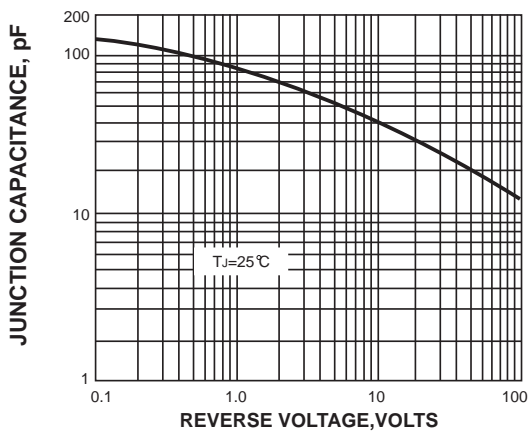
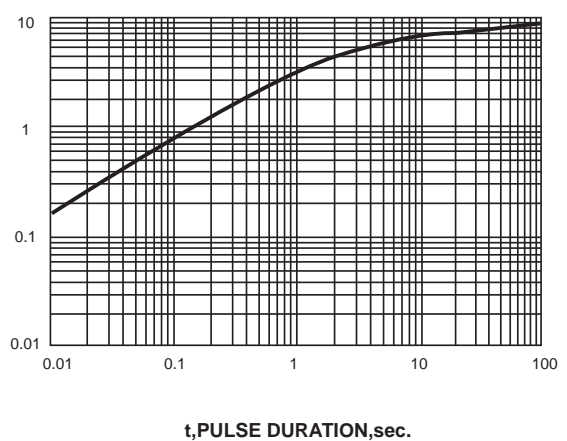


FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



The curve above is for reference only.

单击下面可查看定价，库存，交付和生命周期等信息

[>>MDD\(辰达行\)](#)