



KBU8005 THRU KBU810

Reverse Voltage - 50 to 1000 Volts Forward Current - 8.0 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, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

Mechanical Data

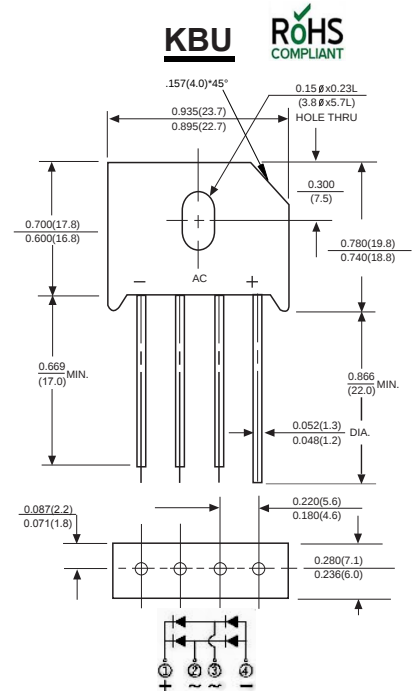
Case : JEDEC KBU Molded plastic body

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

Polarity : Polarity symbol marking on body

Mounting Position : Any

Weight : 0.3ounce, 8.0grams



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	MDD KBU8005	MDD KBU801	MDD KBU802	MDD KBU804	MDD KBU806	MDD KBU808	MDD KBU810	UNITS
Marking Code									
Maximum repetitive 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 output rectified current at $T_A=50^\circ\text{C}$	I_{AV}	8.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	300							A
Maximum instantaneous forward voltage drop per bridge element at 8.0A	V_F	1.1							V
Maximum DC reverse current $T_A=25^\circ\text{C}$	I_R	10							μA
at rated DC blocking voltage $T_A=125^\circ\text{C}$		0.5							mA
Typical Junction Capacitance (Note 1)	C_J	200							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	2.7							$^\circ\text{C/W}$
Operating junction temperature range	T_J	-55 to +150							$^\circ\text{C}$
storage temperature range	T_{STG}	-55 to +150							$^\circ\text{C}$

NOTES:

1. Thermal resistance from Junction to Ambient on P.C. board mounting.



Ratings And Characteristic Curves

Fig. 1 Derating Curve for Output Rectified Current

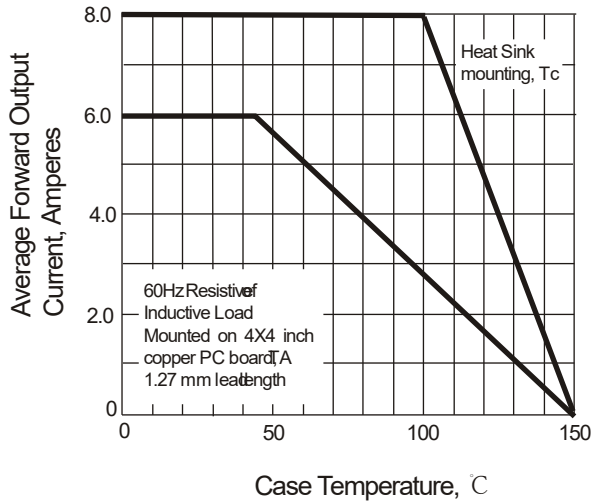


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

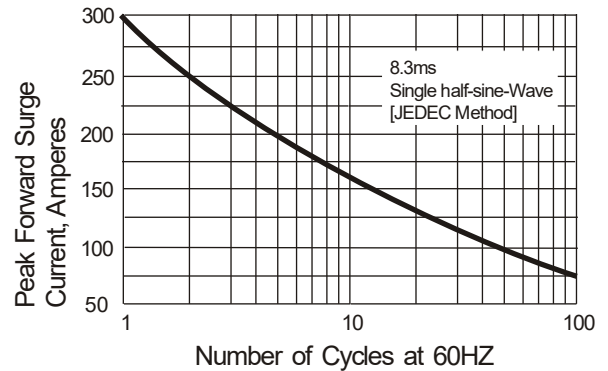


Fig. 3 Typical Instantaneous Forward Characteristics

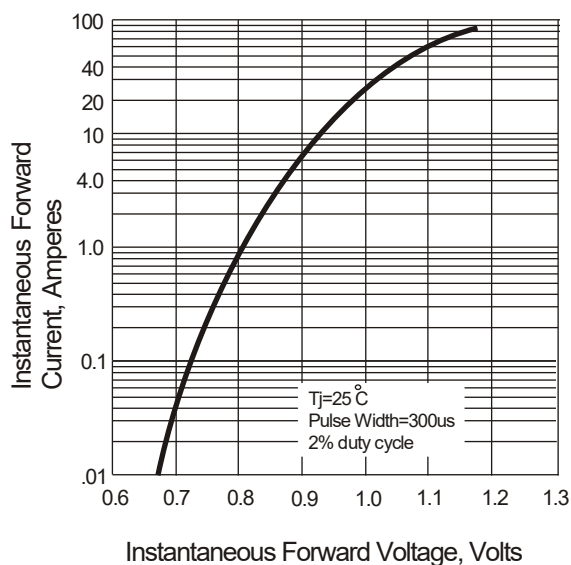


Fig. 4 Typical Reverse Characteristics

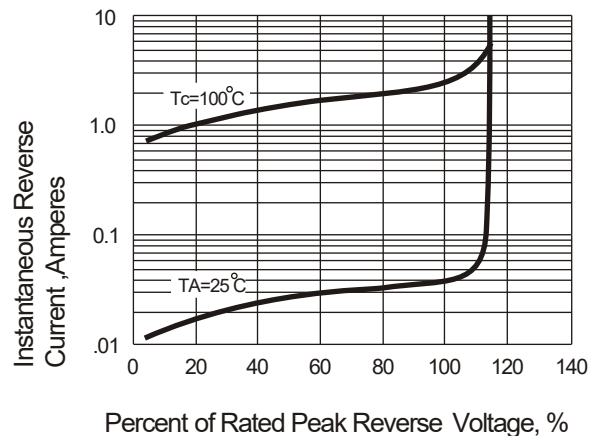
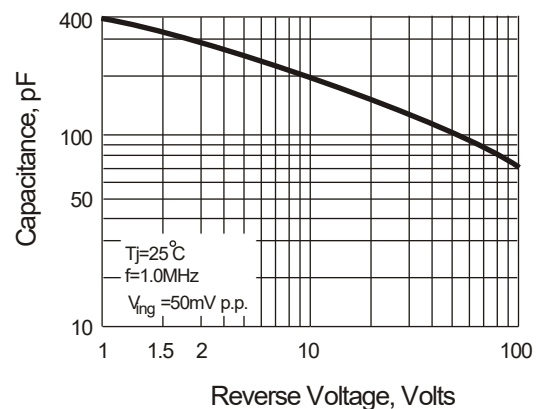


Fig. 5 Typical Junction Capacitance



The curve above is for reference only.