



KBU15005 THRU KBU1510

Reverse Voltage - 50 to 1000 Volts Forward Current - 15.0 Amperes

SILICON BRIDGE RECTIFIERS

Features

- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ Plastic material has U/L flammability classification 94V-0
- ◆ High temperature soldering guaranteed:
260°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

Mechanical Data

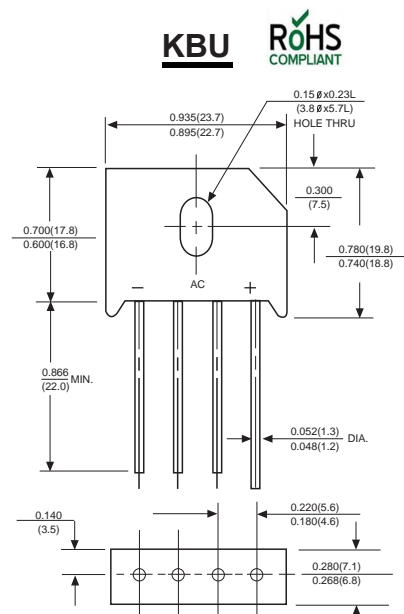
Case : JEDEC KBU Molded plastic body

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

Polarity : Polarity symbol marking on body

Mounting Position : Any

Weight : 0.27ounce, 7.59grams



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	KBU 15005	KBU 1501	KBU 1502	KBU 1504	KBU 1506	KBU 1508	KBU 1510	UNITS
Marking Code		MDD KBU 15005	MDD KBU 1501	MDD KBU 1502	MDD KBU 1504	MDD KBU 1506	MDD KBU 1508	MDD KBU 1510	
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 (with heatsink NOTE 2) Rectified current @ $T_c=100^\circ\text{C}$ (without heatsink)	$I_{(AV)}$	15.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	300.0							A
Maximum forward voltage at 7.5A DC	V_F	1.0							V
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$	I_R	10							μA
		0.5							mA
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. Device mounted on 100mm*100mm*1.6mm Cu plate heatsink



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Ratings And Characteristic Curves

FIG.1-MAXIMUM FORWARD SURGE CURRENT

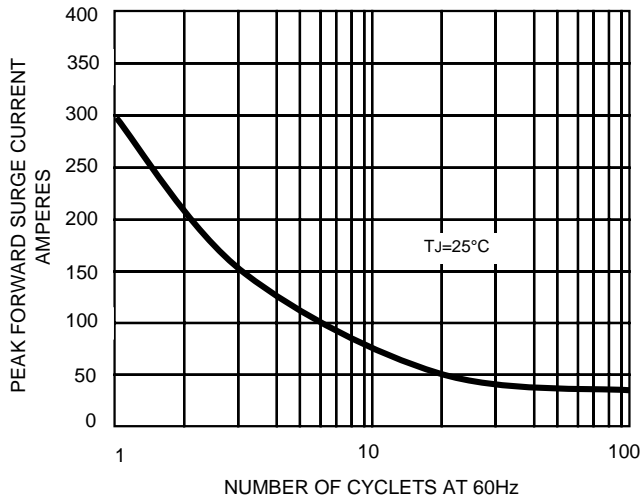


FIG. 2 – DERATING CURVE OUTPUT RECTIFIED CURRENT

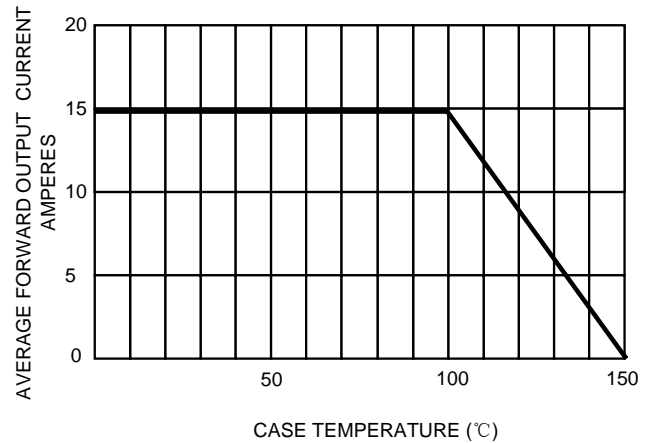


FIG.3- TYPICAL FORWARD CHARACTERISTICS

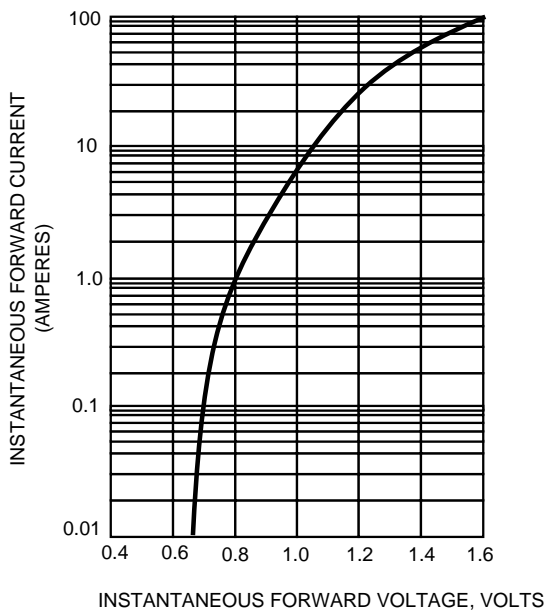
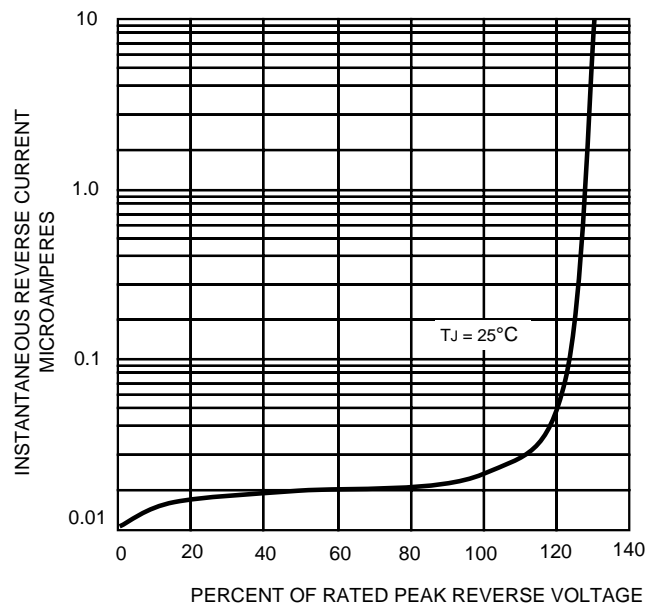


FIG.4- TYPICAL REVERSE CHARACTERISTICS



The curve above is for reference only.