



KBU15005 thru KBU1510

15.0 A Single-Phase Silicon Bridge Rectifier

Rectifier Reverse Voltage 50 to 1000V

Features

- Ideal for P.C. Board mounting
- High surge current capability
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- High temperature soldering guaranteed 265°C /10 seconds at 5 lbs (2.3kg) tension

Mechanical Data

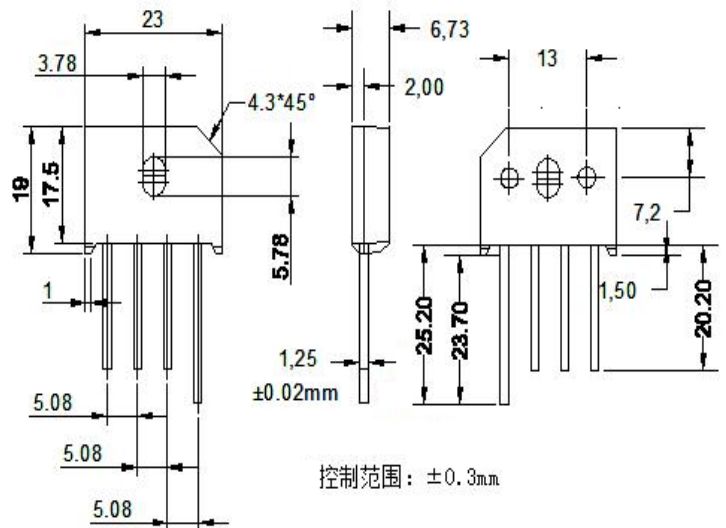
Case: Molded plastic body

Terminals: Plated leads solderable per MIL-STD-202, Method 208

Polarity: Polarity symbols molded on body

Mounting Position:: Any

Mounting Torque: 5 in-lbs max.



Dimensions in millimeters(1mm =0.0394")

Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.
For Capacitive load derate current by 20%.

Parameter	Symbol	KBU 15005	KBU 1501	KBU 1502	KBU 1504	KBU 1506	KBU 1508	KBU 1510	unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at TC=100°C	IF(AV)	15.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	220							A
Rating for fusing (t<8.3ms)	I ² t	200							A ² sec
Typical thermal resistance per leg (1)	ReJc	4.2							°C / W
Operating junction and storage temperature range	TJ, TSTG	-55 to + 150							°C

Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.
For Capacitive load derate by 20 %.

Parameter	Symbol	KBU 15005	KBU 1501	KBU 1502	KBU 1504	KBU 1506	KBU 1508	KBU 1510	Unit
Maximum instantaneous forward voltage drop per leg at 7.5A	VF	1.1							V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =125°C	IR	10 500							μA

Notes: (1) Thermal resistance from Junction to Ambient on P.C.board mounting.

Rating and Characteristic Curves ($T_A=25^{\circ}\text{C}$ Unless otherwise noted)
KBU15005 thru KBU1510

Fig 1-forwardCurrent derating Curve

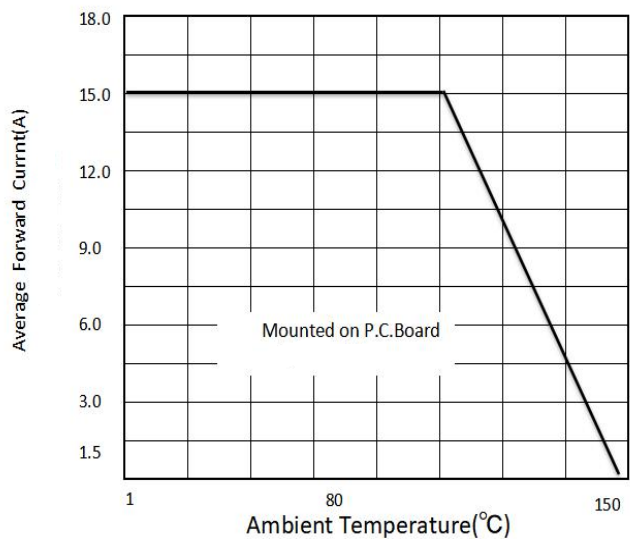


Fig.2-Maximum Non-Repetitive Surge Current

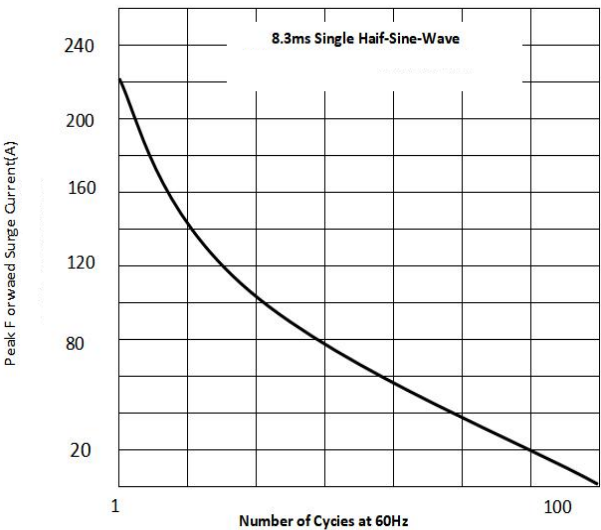


FIG3.Typical Reverse Characteristics

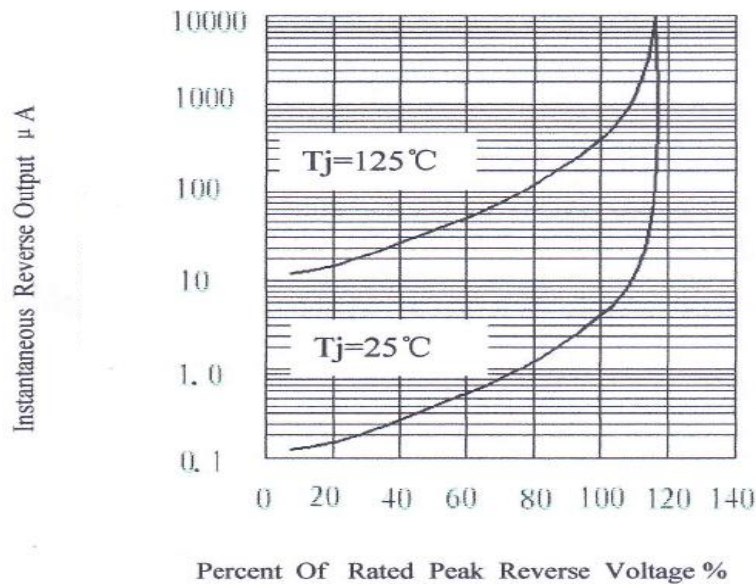


FIG4.Instantaneous Forward Voltage

