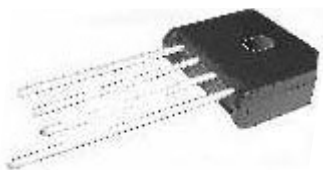




# LI DE HENG ELECTRONICS KBU35005 thru KBU3510

## 35.0 A Single-Phase Silicon Bridge Rectifiers

Rectifier Reverse Voltage 50 to 1000V



### Features

- Ideal for P.C. Board mounting
- High surge current capability
- This series is UL listed under the Recognized Component Index, file number E142814
- 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

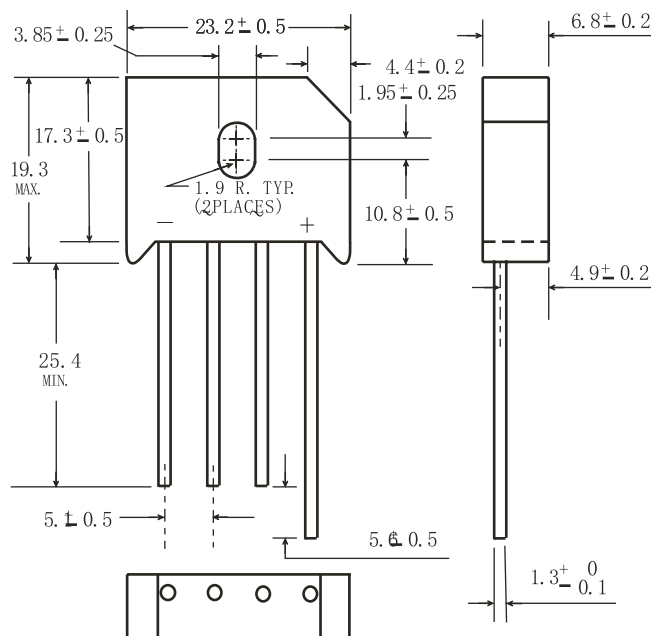
Terminals: Plated leads solderable per MIL-STD-202, Method 208

Polarity: Polarity symbols molded on body

Mounting Position:: Any

Mounting Torque: 5 in-lbs max.

Weight: 0.3 ounce, 8.0 grams (approx)



Dimensions in millimeters = 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 35005	KBU 3501	KBU 3502	KBU 3504	KBU 3506	KBU 3508	KBU 3510	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 TA=100°C	IF(AV)	35							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	400							A
Rating for fusing ( t<8.3ms)	I <sup>2</sup> t	240							A <sup>2</sup> sec
Typical thermal resistance per element (1)	ReJA	0.8							°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.

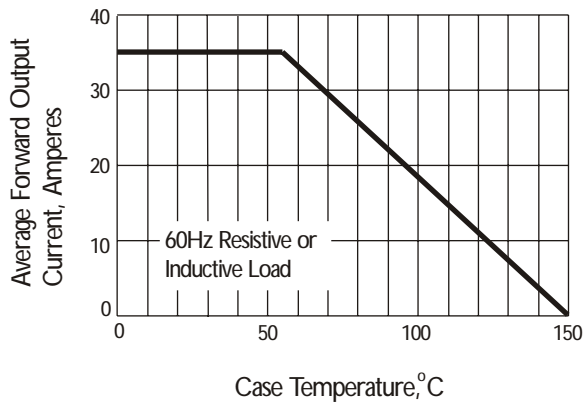
For Capacitive load derate by 20 %.

Parameter	Symbol	KBU 35005	KBU 3501	KBU 3502	KBU 3504	KBU 3506	KBU 3508	KBU 3510	Unit
Maximum instantaneous forward voltage drop per leg at 17.5A	VF	1.0							V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =125°C	IR	10 500							μA

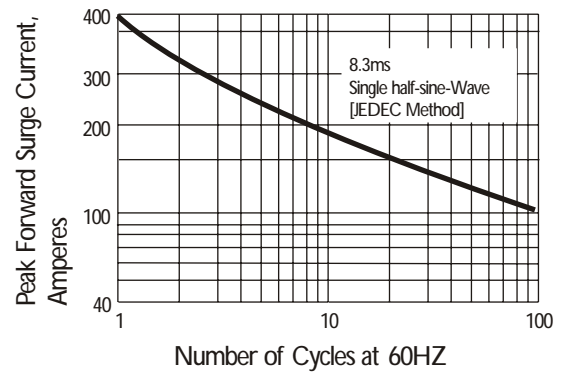
Notes: (1) Thermal resistance from Junction to Ambient on P.C. board mounting.

## Rating and Characteristic Curves ( $T_A=25^{\circ}\text{C}$ Unless otherwise noted ) KBU35005 thru KBU3510

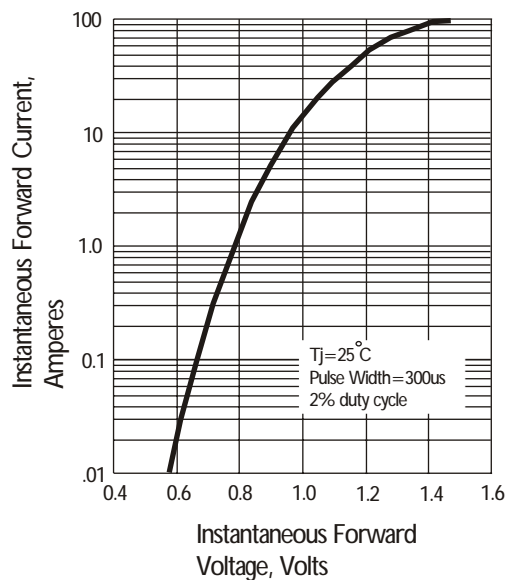
**Fig. 1 Derating Curve for Output Rectified Current**



**Fig. 2 Maximum Non-repetitive Peak Forward Surge Current**



**Fig. 3 Typical Instantaneous Forward Characteristics**



**Fig. 4 Typical Reverse Characteristic**

