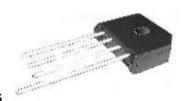
### KBU10005 thru KBU1010

## 10 A Single-Phase Silicon Bridge Rectifier

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
- For purchase please contact ZEIVO, Assistant E-075583681018-engineer

#### **Mechanical Data**

Case: Molded plastic body

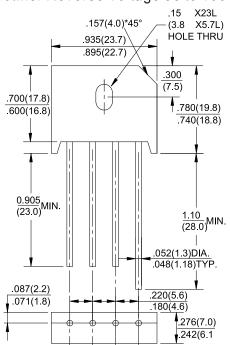
Terminals: Plated leads solderable per MIL-STD-202,

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)



#### 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%.

Symbol	KBU 10005	KBU 1001	KBU 1002	KBU 1004	KBU 1006	KBU 1008	KBU 1010	unit
VRRM	50	100	200	400	600	800	1000	V
VRMS	35	70	140	280	420	560	700	V
VDC	50	100	200	400	600	800	1000	V
IF(AV)	10							Α
IFSM	300							Α
I <sup>2</sup> t	300							A <sup>2</sup> sec
ReJA	2.7							°C/W
TJ, TSTG	-55 to + 150							°C
	VRRM VRMS VDC IF(AV) IFSM I <sup>2</sup> t ReJA TJ,	VRRM 50 VRMS 35 VDC 50  IF(AV)  IFSM I <sup>2</sup> t  ReJA TJ,	VRRM 50 1001  VRRM 50 100  VRMS 35 70  VDC 50 100  IF(AV)  IFSM  I²t  ReJA  TJ,	Symbol         10005         1001         1002           VRRM         50         100         200           VRMS         35         70         140           VDC         50         100         200           IF(AV)           IFSM         I²t         ReJA           TJ,         55	Symbol         10005         1001         1002         1004           VRRM         50         100         200         400           VRMS         35         70         140         280           VDC         50         100         200         400           IF(AV)         10           IFSM         300           I <sup>2</sup> t         300           ReJA         2.7           TJ,         55 to ± 150	Symbol         10005         1001         1002         1004         1006           VRRM         50         100         200         400         600           VRMS         35         70         140         280         420           VDC         50         100         200         400         600           IF(AV)         10           IFSM         300           ReJA         2.7           TJ,         55 to + 150	Symbol         10005         1001         1002         1004         1006         1008           VRRM         50         100         200         400         600         800           VRMS         35         70         140         280         420         560           VDC         50         100         200         400         600         800           IF(AV)         10           IFSM         300           ReJA         2.7           TJ,         55 to + 150	Symbol         10005         1001         1002         1004         1006         1008         1010           VRRM         50         100         200         400         600         800         1000           VRMS         35         70         140         280         420         560         700           VDC         50         100         200         400         600         800         1000           IF(AV)         10           IFSM         300           ReJA         2.7           TJ,         55 to + 150

#### 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 10005	KBU 1001	KBU 1002	KBU 1004	KBU 1006	KBU 1008	KBU 1010	Unit
Maximum instantaneous forward voltage drop per leg at 10A	VF	1.05							V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =125°C	lR	10 500						μΑ	

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

# Rating and Characteristic Curves (TA=25°C Unless otherwise noted) KBU10005 thru KBU1010

Fig. 1 Derating Curve for **Output Rectified Current** 12.0 Average Forward Output Current, Amperes 10.0 8.0 6.0 4.0 Inductive Load Mounted on 4X4 inch 2.0 copper PC board, TA 0 0 50 100 150  $\mathsf{Case} \; \mathsf{Temperature}, ^{\circ} \mathsf{C}$ 

Fig. 3 Typical Instantaneous Forward Characteristics

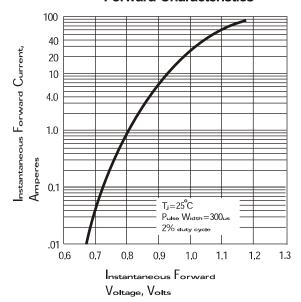


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

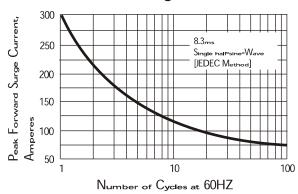


Fig. 4 Typical Reverse Characteristics

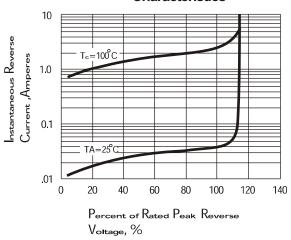


Fig. 5 Typical Junction Capacitance

