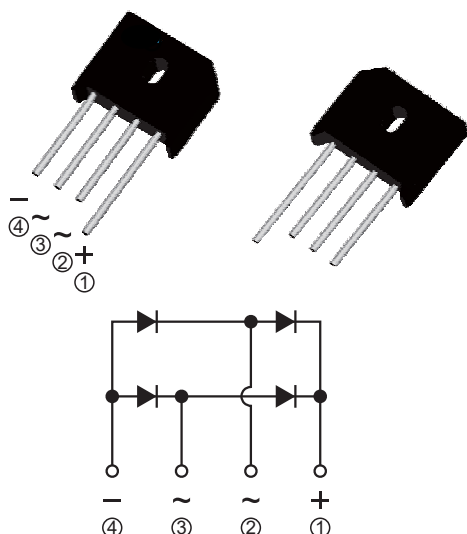




■ FEATURES

- UL recognition, file number E142814
- Glass passivated chip junction
- High surge current capability
- Low reverse leakage current
- High case dielectric strength of 1500 V_{RMS}
- Ideal for printed circuit boards

■ TYPICAL APPLICATIONS

- General purpose use in single phase AC/DC bridge full wave rectification

■ MECHANICAL DATA

- Case: KBU, molded plastic, epoxy meets UL 94 V-0 flammability rating
- Terminals: Matte tin plated leads, solderable per J-STD-002 and JESD 22-B102
- Polarity: As marked on body
- Mounting : Any

35.0 A Single-Phase Bridge Rectifiers

Rectifier Reverse Voltage 50 to 1000V

■ MAXIMUM RATINGS & THERMAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load.

Parameter	Symbol	KBU 35005	KBU 3501	KBU 3502	KBU 3504	KBU 3506	KBU 3508	KBU 3510	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS bridge input 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 rectified output current at T _c =100°C ⁽¹⁾⁽²⁾	I _{F(AV)}	35.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	400							A
Rating for fusing (t<8.3ms)	I ² t	664							A ² sec
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150							

■ ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load.

Parameter	Symbol	KBU 35005	KBU 3501	KBU 3502	KBU 3504	KBU 3506	KBU 3508	KBU 3510	Unit
Maximum instantaneous forward voltage drop per diode at 17.5 A	V _F	1.1							V
Maximum DC reverse current at rated T _J =25°C DC blocking voltage per diode T _J =125°C	I _R	10 1000							μA

Notes:

(1) Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with screw.

(2) Units mounted on a 100 cm x 100 cm x 1.6 cm copper plate heatsink.

■ **RATINGS AND CHARACTERISTIC CURVES** ($T_A=25^\circ\text{C}$ Unless otherwise noted)

Fig. 1 - Derating Curve for Output Rectified Current

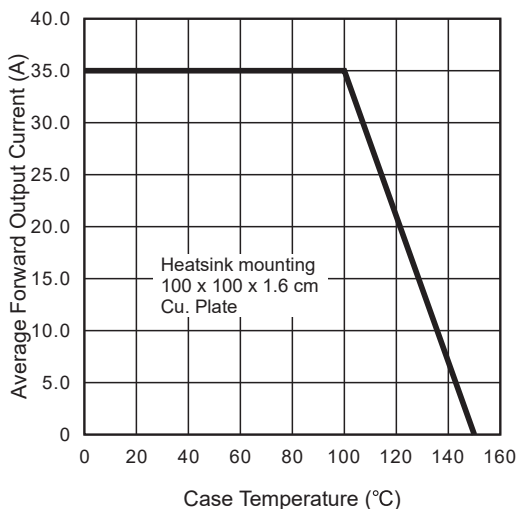


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

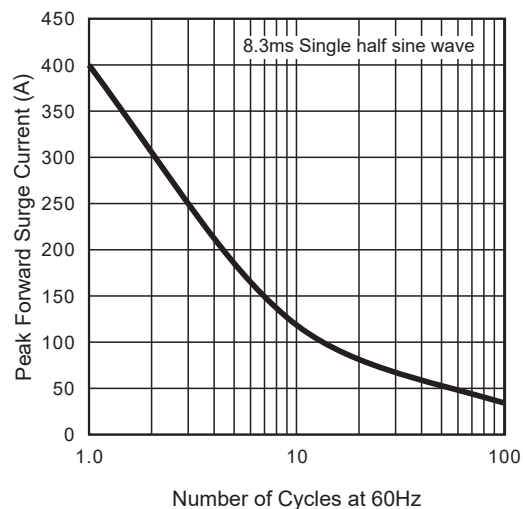


Fig. 3 - Typical Instantaneous Forward Characteristics

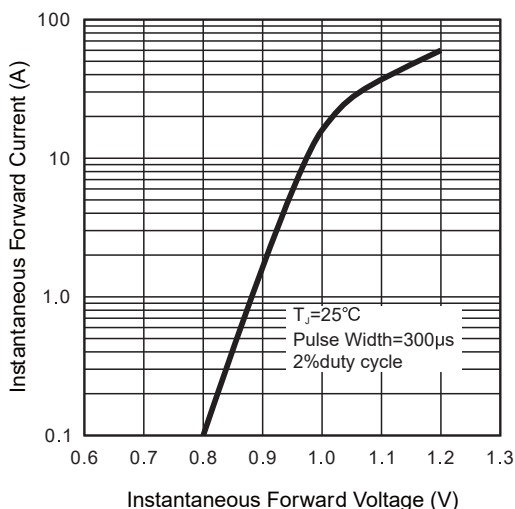


Fig. 4 - Typical Revers Characteristics

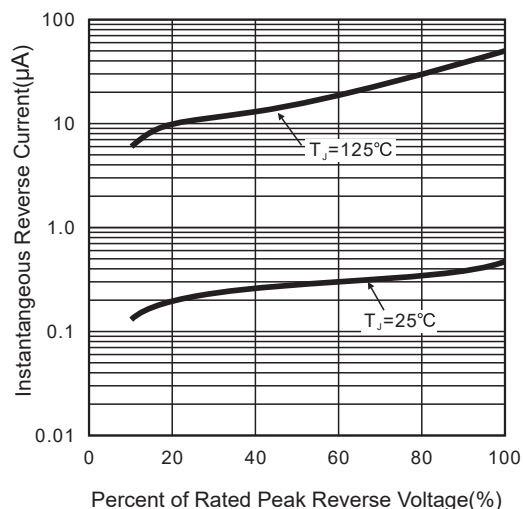
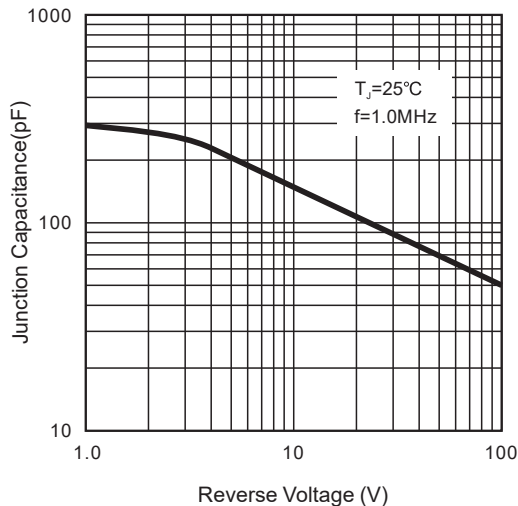
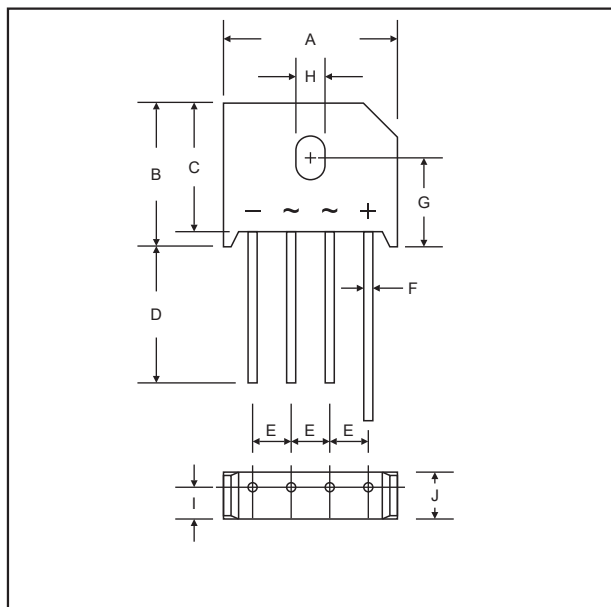


Fig. 5 - Typical Junction Capacitance



■ PACKAGE OUTLINE DIMENSIONS



DIM.	KBU			
	Unit(mm)		Unit(inch)	
	Min.	Max.	Min.	Max.
A	22.70	23.70	0.894	0.934
B	18.80	19.80	0.741	0.780
C	16.80	17.80	0.662	0.701
D	18.00	—	0.709	—
E	4.60	5.60	0.181	0.221
F	1.10	1.30	0.043	0.051
G	11.30	12.30	0.445	0.485
H	3.40	3.90	0.134	0.154
I	4.10	5.00	0.162	0.197
J	6.10	7.00	0.240	0.276