



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.
TEL: 2790-0314 FAX: 2790-0206



SINGLE-PHASE BRIDGE RECTIFIER

KBU6A THRU KBU6M

VOLTAGE RANGE
CURRENT

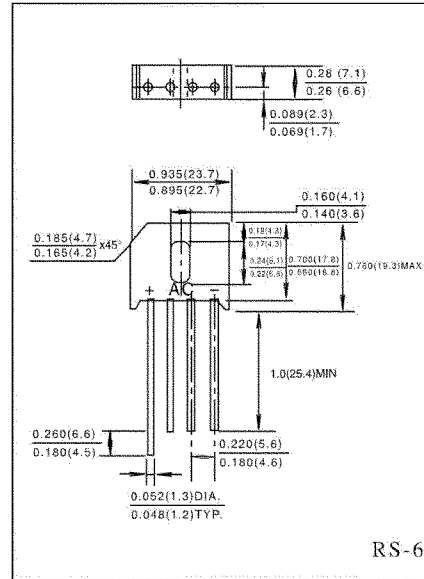
50 to 1000 Volts
6.0 Ampere

FEATURES

- Low cost
- This series is UL recognized under component index, file number E127707
- High forward surge current capability
- Ideal for printed circuit board
- High temperature soldering guaranteed: 260°C/10 second, 0.375" (9.5mm) lead length at 5 lbs. (2.3kg) tension.

MECHANICAL DATA

- Case: Transfer molded plastic
- Terminal: Lead solderable per MIL - STD - 202E method 208C
- Polarity: Polarity symbols marked on case.
- Mounting: Thru hole for #6 screw, 5 in, -lbs. Torque max.
- Weight: 0.27 ounce, 7.59 gram



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 derate current by 20%

| | SYMBOLS | KBU6A | KBU6B | KBU6D | KBU6G | KBU6J | KBU6K | KBU6M | UNIT |
|--|-----------------|---------------------|-------|-------|-------|-------|-------|-------|--------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum Average Forward Rectified Output Current, at $T_C = 100^\circ C$ $T_A = 40^\circ C$ (Note3) | $I_{(AV)}$ | 6.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method) | I_{FSM} | 250 | | | | | | | Amps |
| Rating for Fusing (t<8.3ms) | I^2t | 260 | | | | | | | A^2s |
| Maximum Instantaneous Forward Voltage Drop per bridge element at 6.0A | V_F | 1.0 | | | | | | | Volts |
| Maximum DC Reverse Current at rated DC blocking voltage per element | I_R | $T_A = 25^\circ C$ | | | | | | | μA |
| | | $T_A = 100^\circ C$ | | | | | | | mA |
| Typical Junction Capacitance (Note 1) | C_j | 200 | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | $R_{\theta JC}$ | 4.7 | | | | | | | $^\circ C/W$ |
| Operating Temperature Range | T_j | (-65 to +150) | | | | | | | $^\circ C$ |
| Storage Temperature Range | T_{STG} | (-65 to +150) | | | | | | | |

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on 2.6" X 1.4" X 0.06" thick (6.3 X 3.5 X 0.15cm) Al. plate.
3. Unit mounted in free air, no heatsink. P.C.B. at 375" (9.5mm) lead length with. 5" X 5" (12 X 12mm) copper pads.



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RATINGS AND CHARACTERISTIC CURVES KBU6A THRU KBU6M

FIG.1-DERATING CURVE FOR
 OUTPUT RECTIFIED CURRENT

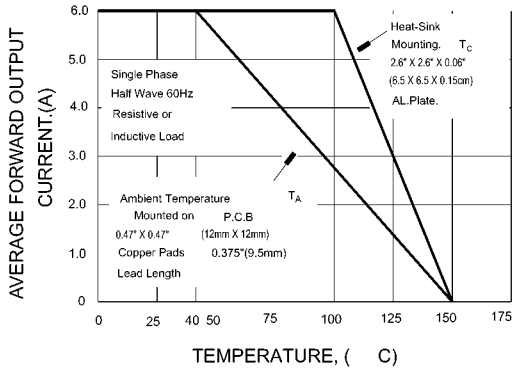


FIG.2-MAXIMUM NON-REPETITIVE PEAK
 FORWARD SURGE CURRENT PER ELEMENT

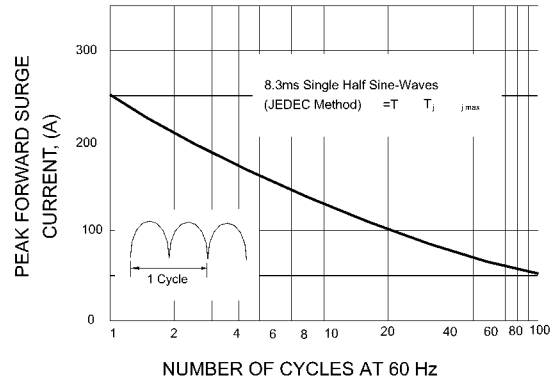


FIG.3-TYPICAL FORWARD CHARACTERISTICS
 PER BRIDGE ELEMENT

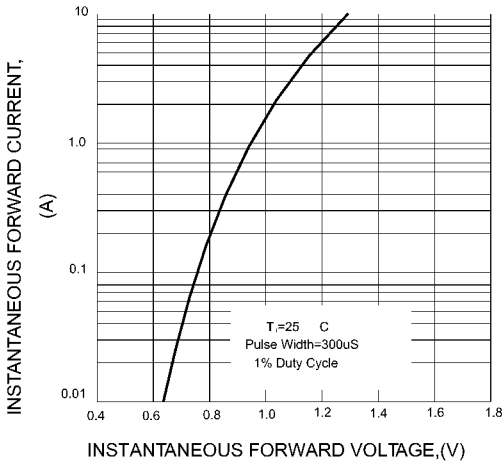


FIG.4-TYPICAL REVERSE CHARACTERISTICS
 PER BRIDGE ELEMENT

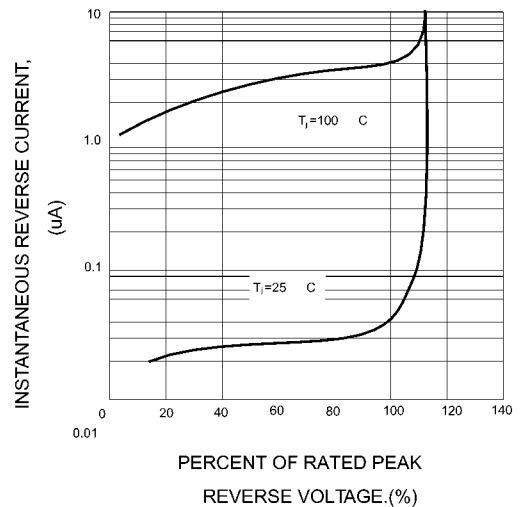


FIG.5-TYPICAL JUNCTION CAPACITANCE
 PER BRIDGE ELEMENT

