



KBJ601G THRU KBJ610G

CLASS PASSIVATED SINGLE - PHASE BRIDGE RECTIFIERS



FEATURES

- * Plastic Package has Underwriters Laboratory Flammability Classification 94V - 0
- * Ideal for printed circuit boards
- * Glass passivated chip junction
- * High Surge Current Capability
- * High temperature Soldering Guaranteed
260°C/10 Seconds, 0.375(9.5mm) lead length

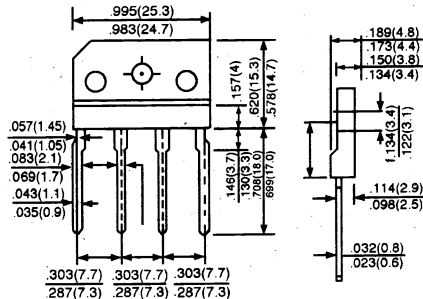
MECHANICAL DATA

- * Case: Moled plastic body over passivated junctions

VOLTAGE RANGE

50 to 1000 Volts
CURRENT
6.0 Amperes

KBJ



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

| TYPE NUMBER | SYMBOLS | KBJ 601G | KBJ 602G | KBJ 604G | KBJ 606G | KBJ 608G | KBJ 610G | UNITS |
|--|-----------------|---------------|----------|----------|----------|----------|----------|---------------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum D. C Blocking Voltage | V_{DC} | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward $T_C = 100^\circ\text{C}$ (NOTE 1) rectified output current $T_A = 40^\circ\text{C}$ (NOTE 2) | $I_{F(AV)}$ | 6 2.8 | | | | | | A |
| Peak forward surge current 8.3ms single half sine - wave superimposed on rated load (JEDED Method) | I_{FSM} | 150 | | | | | | A |
| Maximum instantaneous forward drop per element at 6.0A | V_F | 1.1 | | | | | | V |
| Maximum DC revers current at rated $T_A = 25^\circ\text{C}$ DC blocking Voltage per element $T_A = 100^\circ\text{C}$ | I_R | 5.0 500 | | | | | | μA |
| Typical junction capacitance (NOTE 3) | C_J | 80 | | | | | | pF |
| Typical thermal resistance per leg (NOTE 1) | $R_{\theta JC}$ | 3.4 | | | | | | $^\circ\text{C}/\text{W}$ |
| Operation Temperature and storage temperature range | T_J, T_{STG} | - 55 to + 150 | | | | | | $^\circ\text{C}$ |

- NOTES:**
1. Unite case mounted on 2.95 x 2.95 x 0.06" (75 x 75 x 1.6mm) Cu plate heatsink
 2. Unit mounted on P. C. B 0.5 x 0.5" (12 x 12mm) copper pads and 0.375" (9.5mm) lead length
 3. Measured at 1MHz and applied reverse Voltage of 4.0 Volts

RATINGS AND CHARACTERISTIC CURVES

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FIG. 1 - FORWARD OUTPUT CURRENT DERATING CURVE

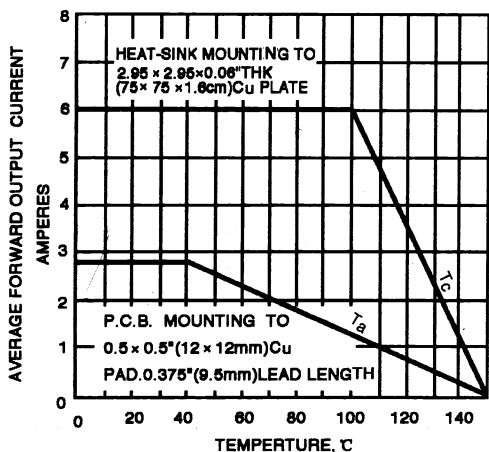


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT - PER ELEMENT

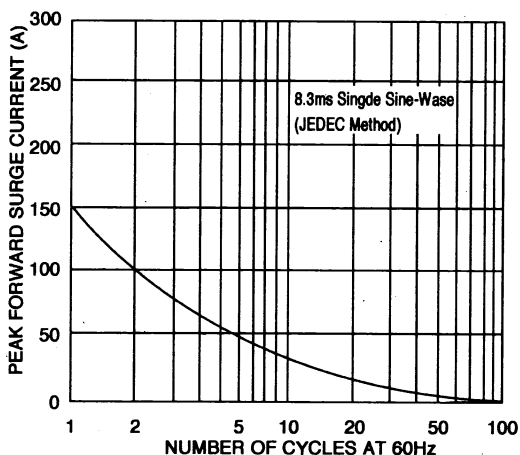


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS - PER ELEMENT

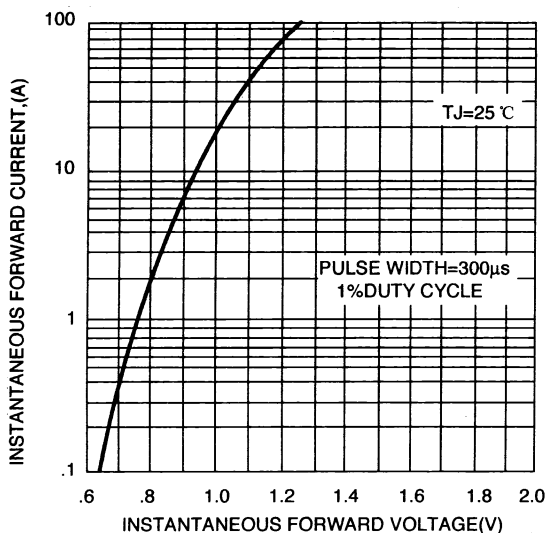


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS - PER ELEMENT

