

6.0A ULTRA-FASTGLASS PASSIVATED BRIDGE RECTIFIER

FEATURES

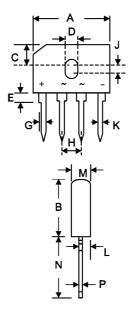
- * Glass Passivated Die Construction
- * Low Forward Voltage Drop
- * High Current Capability
- * High Reliability
- * High Surge Current Capability
- * High-Switching Speed 100 Nanosecond Recovery Time

MECHANICAL DATA

* Case: Molded Plastic

* Marking:Type Number

* Epoxy: UL94V-O rate flame retardant
* Terminals: Plated Leads Solderable
Per MIL-STD-202 Method 208
* Polarity: As Marking on Body
* Mounting Position: Any
* Weight: 4.0 gram (approx.)



| UBU | | | | | | | |
|----------|---------|-------|--|--|--|--|--|
| Dim | Min Max | | | | | | |
| Α | 21.80 | 22.30 | | | | | |
| В | 18.30 | 18.80 | | | | | |
| С | 7.40 | 7.90 | | | | | |
| D | 3.50 | 4.10 | | | | | |
| E | 1.52 | 2.03 | | | | | |
| G | 2.16 | 2.54 | | | | | |
| Н | 4.83 | 5.33 | | | | | |
| J | 1.65 | 2.16 | | | | | |
| K | 1.65 | 2.03 | | | | | |
| L | 0.76 | 1.02 | | | | | |
| M | 3.30 | 3.56 | | | | | |
| N | 17.50 | 18.00 | | | | | |
| Р | 0.46 | 0.56 | | | | | |
| Unit :mm | | | | | | | |
| | | | | | | | |

MAXIMUM RATINGS AND ELECTRICAL CHARATERISTICS

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

| Characteristic | Symbol | UGU6A | UGU6B | UGU6D | UGU6G | UGU6J | UGU6K | Unit |
|---|---|-------------|-------|-------|-------|-------|-------|--------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | $\begin{matrix} V_{RRM} \\ V_{RWM} \\ V_{R} \end{matrix}$ | 50 | 100 | 200 | 400 | 600 | 800 | V |
| RMS Reverse Voltage | | 35 | 70 | 140 | 280 | 420 | 560 | ٧ |
| Average Rectifier Forward Current @ T _C =100 | I _{O(AV)} | 6.0 | | | | | | |
| Non-Repetitive Peak Surge Current 8.3 ms Single half sine-wave superimposed on rated load | | 175 | | | | | | А |
| Forward Voltage (per element) (I _F =2.0 Amp) | V_{FM} | 1.0 | | | | | | V |
| Peak Reverse Current (Rated DC Voltage, T _C = 25) (Rated DC Voltage, T _C = 100) | | 5.0 500 | | | | | | uA |
| I ² t Rating for Fusing(t<8.35MS) | l ² t | 127 | | | | | | A^2s |
| Typical Thermal Resistance (per leg)(note 1) | $R_{\theta jA}$ | 8.6 | | | | | | k/W |
| Typical Thermal Resistance (per leg)(note 2) | R _{θ jc} | 3.1 | | | | | | k/W |
| Reverse Recovery Time (I _E = 0.5 A. I _D = 1.0 . I _r = 0.25 A.) | | 100 | | | | | | ns |
| Operating and Storage Temperature Range | | -65 to +150 | | | | | | |

Note: 1.Thermal resistance junction to ambient, mounted on PCB at 9.5mm lead length with 12 mm² copper pads.

2.Thermal resistance junction to case, mounted on 5.0×4.0×0.8 cm thick AL plate.

UGU6A thru UGU6K



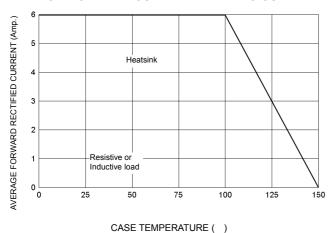
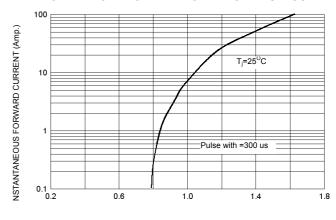
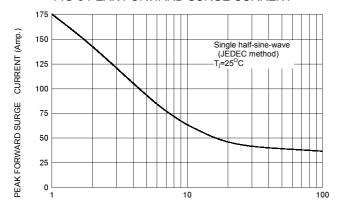


FIG-2 TYPICAL FORWARD CHARACTERISITICS



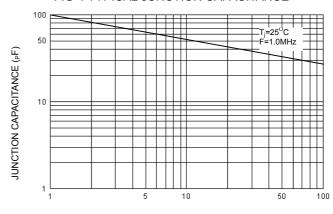
FORWARD VOLTAGE (Volts)

FIG-3 PEAK FORWARD SURGE CURRENT



NUMBER OF CYCLES AT 60 Hz

FIG-4 TYPICAL JUNCTION CAPACITANCE



REVERSE VOLTAGE (Volts)



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