

UG2A THRU UG2D

**ULTRAFAST EFFICIENT
PLASTIC SILICON RECTIFIER**
VOLTAGE: 50 TO 200V CURRENT: 2.0A

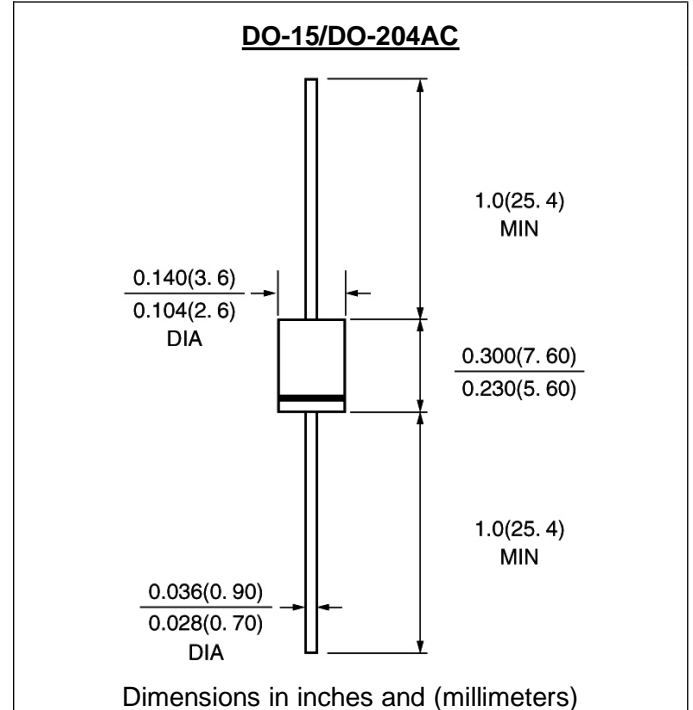


FEATURE

Low power loss
High surge capability
Glass passivated chip junction
Ultra-fast recovery time for high efficiency
High temperature soldering guaranteed
250°C/10sec/0.375" lead length at 5 lbs tension

MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity: color band denotes cathode
Mounting position: any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

| | SYMBOL | UG2A | UG2B | UG2C | UG2D | units |
|---|-----------------------------------|--------------|------|------|------|------------|
| Maximum Recurrent Peak Reverse Voltage | V _{rrm} | 50 | 100 | 150 | 200 | V |
| Maximum RMS Voltage | V _{rms} | 35 | 70 | 105 | 140 | V |
| Maximum DC blocking Voltage | V _{dc} | 50 | 100 | 150 | 200 | V |
| Maximum Average Forward Rectified Current 3/8" lead length at Ta =75°C | I _{f(av)} | 2.0 | | | | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | I _{fsm} | 80.0 | | | | A |
| Maximum Forward Voltage at Forward current 2.0A Peak | V _f | 0.95 | | | | V |
| Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =120°C | I _r | 5.0 200.0 | | | | μ A μ A |
| Maximum Reverse Recovery Time (Note 1) | T _{rr} | 15 | | | | nS |
| Typical Junction Capacitance (Note 2) | C _j | 15 | | | | pF |
| Typical Thermal Resistance (Note 3) | R(ja) | 45 | | | | °C/W |
| Storage and Operating Junction Temperature | T _{stg} , T _j | -55 to +150 | | | | °C |

Note:

- Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =0.25A
- Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- Thermal Resistance from Junction to Ambient at 3/8" lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES UG2A THRU UG2D

FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVES

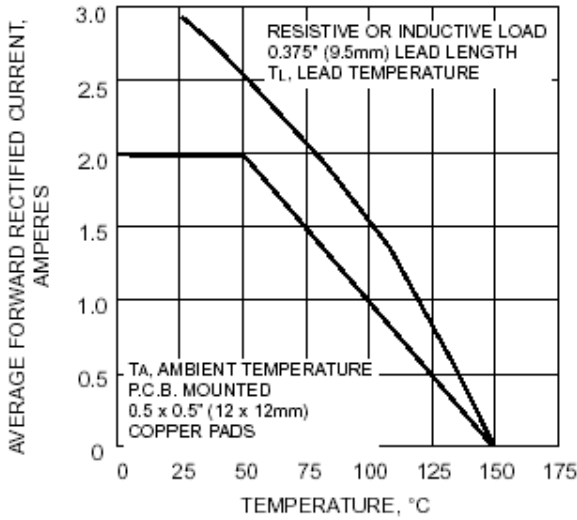


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

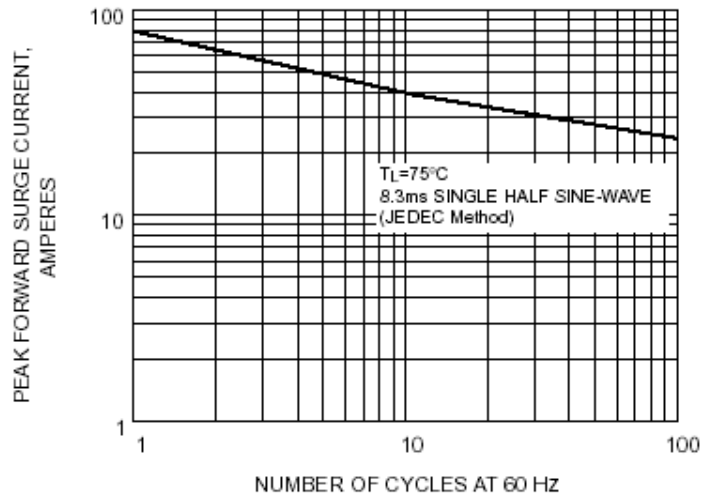


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

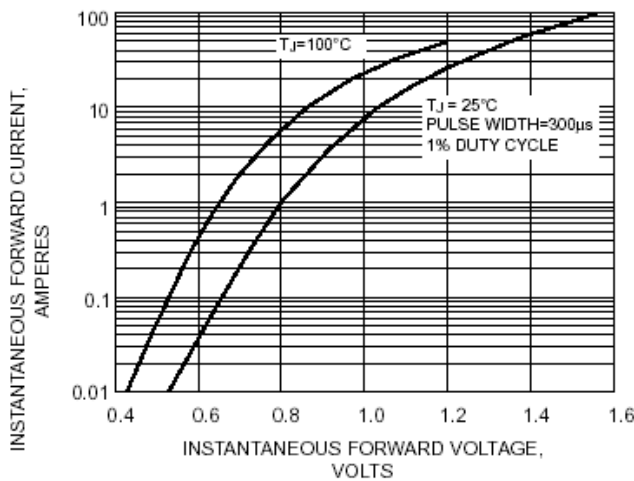


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

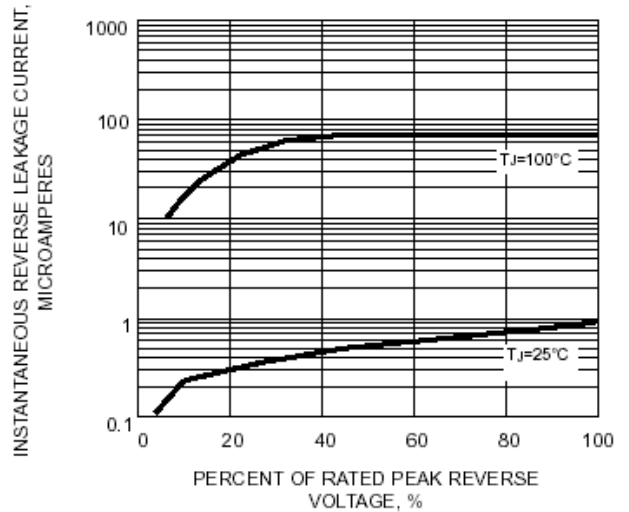


FIG. 5 - REVERSE SWITCHING CHARACTERISTICS

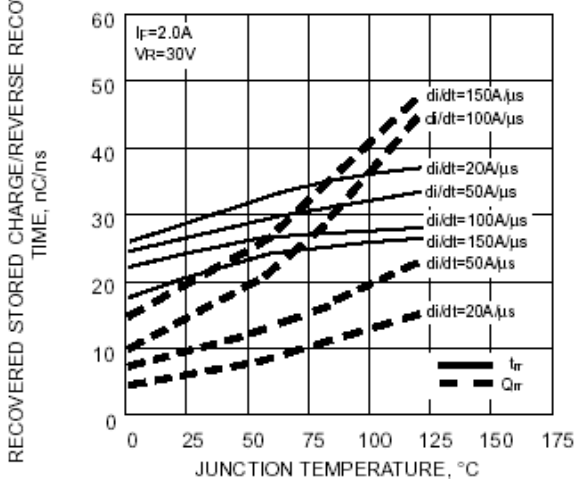


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

