

**VOLTAGE RANGE: 50 - 200V**  
**CURRENT: 1.0 A**

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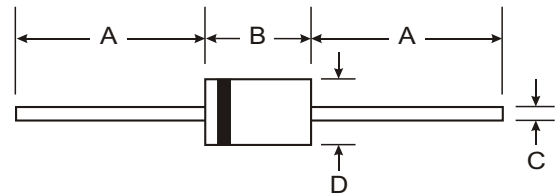
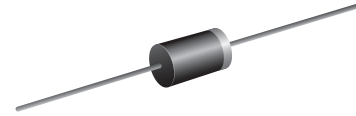
### Features

- 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

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### Mechanical Data

- Case: D O - 4 1 Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.34 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



DO-41		
Dim	Min	Max
A	25.40	—
B	4.06	5.21
C	0.71	0.864
D	2.00	2.72
All Dimensions in mm		

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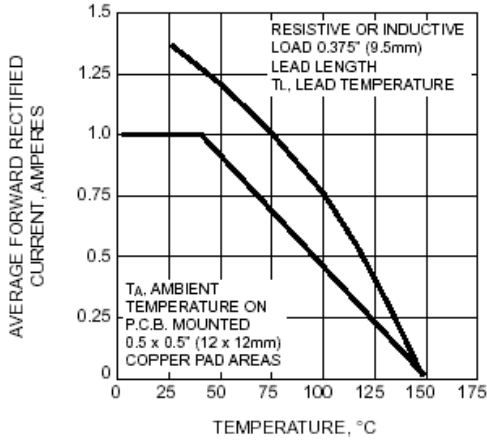
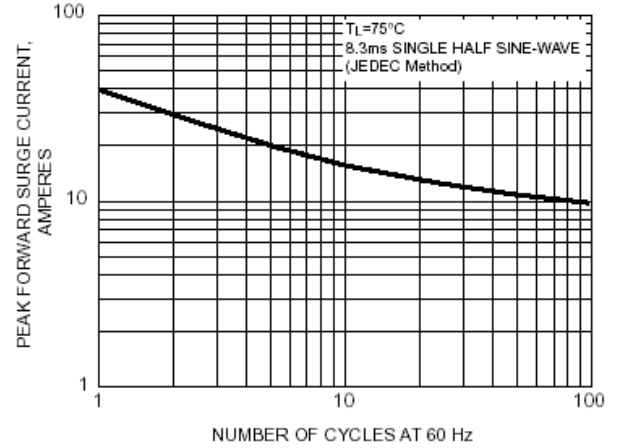
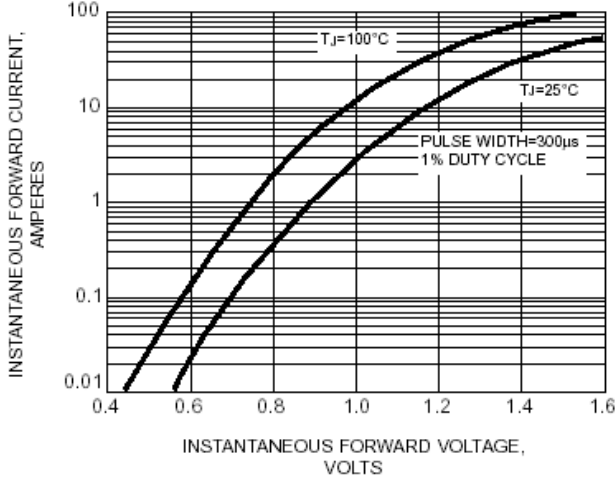
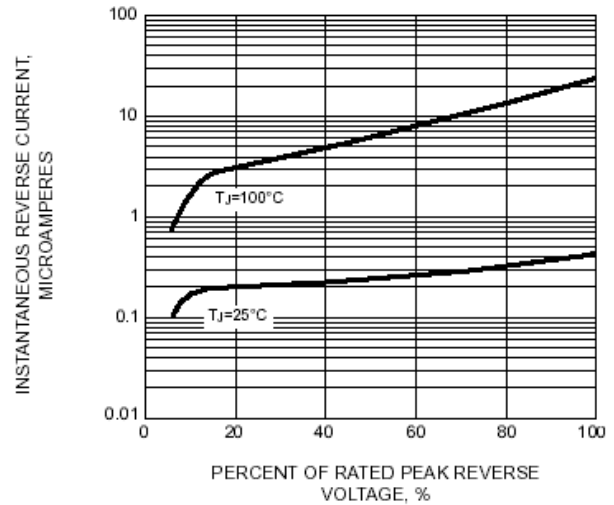
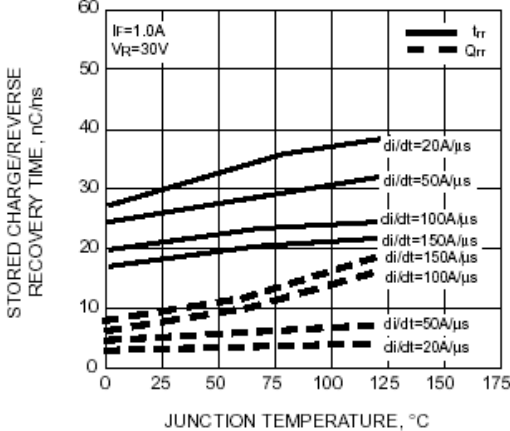
### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	UG1A	UG1B	UG1C	UG1D	Unit
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	50	100	150	200	V
Maximum RMS Voltage	V <sub>rms</sub>	35	70	105	140	V
Maximum DC blocking Voltage	V <sub>dc</sub>	50	100	150	200	V
Maximum Average Forward Rectified Current 3/8" lead length at T <sub>a</sub> = 75°C	I <sub>f(av)</sub>	1.0				A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	40.0				A
Maximum Forward Voltage at Forward current 1A Peak	V <sub>f</sub>	0.95				V
Maximum DC Reverse Current at rated DC blocking voltage	I <sub>r</sub>	5.0 200.0				μA μA
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	15				nS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	7.0				pF
Typical Thermal Resistance (Note 3)	R(ja)	60.0				°C/W
Storage and Operating Junction Temperature	T <sub>stg, T<sub>j</sub></sub>	-55 to +150				°C

**Note:**

1. Reverse Recovery Condition I<sub>f</sub> = 0.5A, I<sub>r</sub> = 1.0A, I<sub>rr</sub> = 0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8" lead length, P.C. Board Mounted

**RATINGS AND CHARACTERISTIC CURVES UG1A THRU UG1D**
**FIG. 1 - FORWARD CURRENT DERATING CURVES**

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

**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**

**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS**

**FIG. 5 - REVERSE SWITCHING CHARACTERISTICS**

**FIG. 6 - TYPICAL JUNCTION CAPACITANCE**
