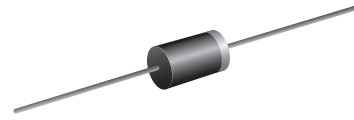


**VOLTAGE RANGE: 50 - 200V**

**CURRENT: 4.0 A**

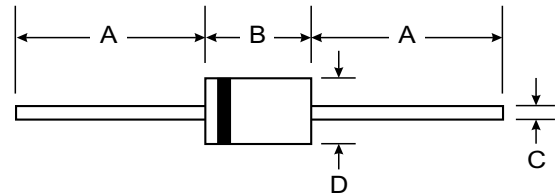


### Features

- 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

- Case: DO-201AD, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



DO-201AD		
Dim	Min	Max
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		



### 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%.

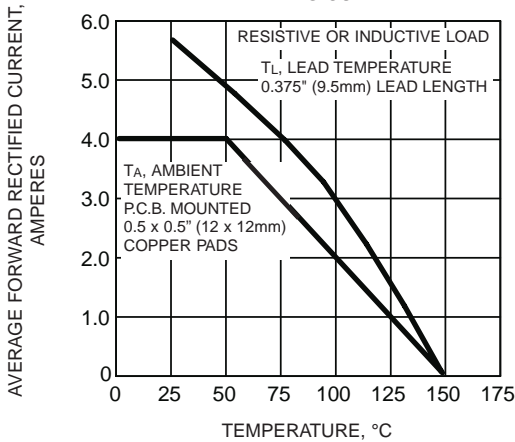
Characteristic	Symbol	UG4A	UG4B	UG4C	UG4D	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	150	200	Volts
Maximum RMS voltage	V <sub>RMS</sub>	35	70	105	140	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	150	200	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at T <sub>L</sub> =75°C	I <sub>(AV)</sub>	4.0				Amps
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method) at T <sub>L</sub> =75°C	I <sub>FSM</sub>	150.0				Amps
Maximum instantaneous forward voltage at 4.0A	V <sub>F</sub>	0.95				Volts
Maximum DC reverse current at rated DC blocking voltage	I <sub>R</sub>	5.0 300.0				μA
Maximum reverse recovery time (NOTE 1)	t <sub>rr</sub>	20.0				ns
Maximum reverse recovery time (NOTE 2)	t <sub>rr</sub>	30.0 50.0				ns
Maximum recovered stored charge (NOTE 2)	Q <sub>rr</sub>	15.0 30.0				nC
Typical junction capacitance (NOTE 3)	C <sub>J</sub>	20.0				pF
Typical thermal resistance (NOTE 4)	R <sub>θJA</sub>	25.0				°C/W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150				°C

**NOTES:**

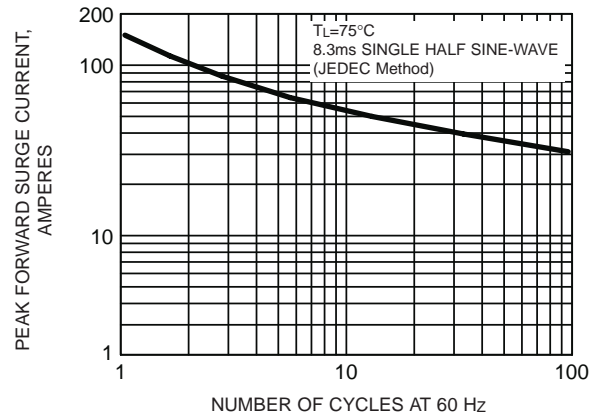
- (1) Reverse recovery test conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>rr</sub>=0.25A
- (2) t<sub>rr</sub> and Q<sub>RR</sub> measured at tester: I<sub>F</sub>=4.0A, V<sub>R</sub>=30V, di/dt=50A/μs, I<sub>rr</sub>=10% I<sub>RM</sub> for measurement of t<sub>rr</sub>
- (3) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
- (4) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length

## RATINGS AND CHARACTERISTIC CURVES UG4A THRU UG4D

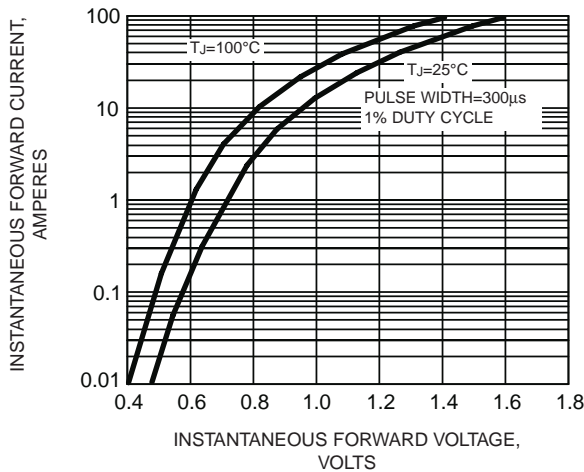
**FIG. 1 - FORWARD CURRENT DERATING CURVE**



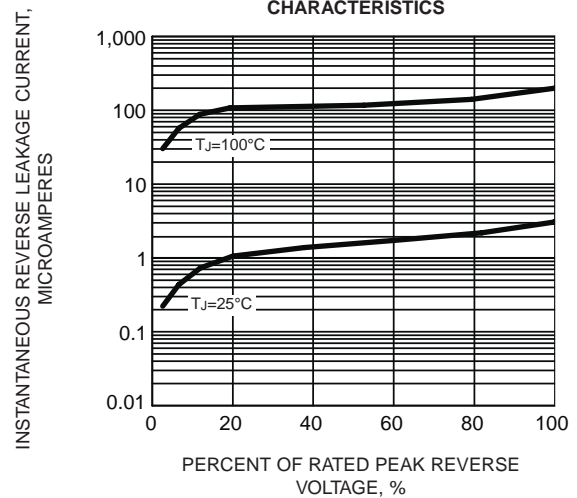
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



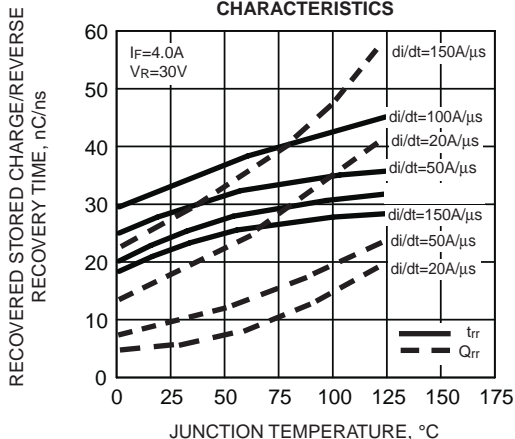
**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS**



**FIG. 5 - REVERSE SWITCHING CHARACTERISTICS**



**FIG. 6 - TYPICAL JUNCTION CAPACITANCE**

