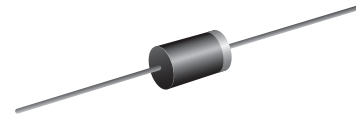


VOLTAGE RANGE: 50 - 200V

CURRENT: 4.0 A

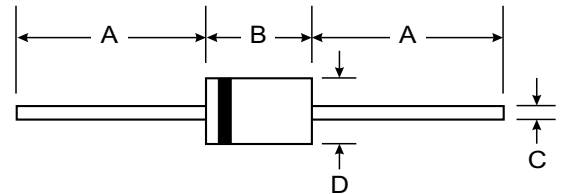


Features

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

NOTES:

- (1) Reverse recovery test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A
- (2) t_{rr} and Q_{RR} measured at tester: I_F=4.0A, V_R=30V, di/dt=50A/μs, I_{rr}=10% I_{RM} for measurement of t_{rr}
- (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

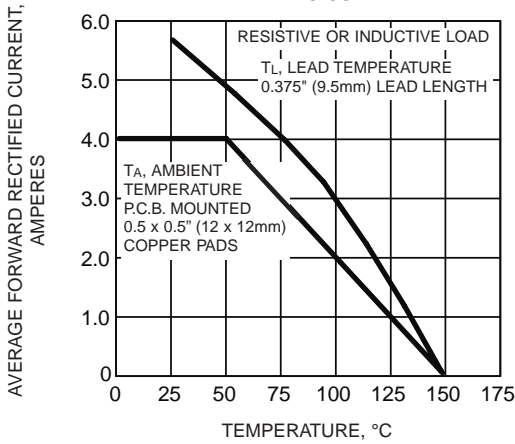


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

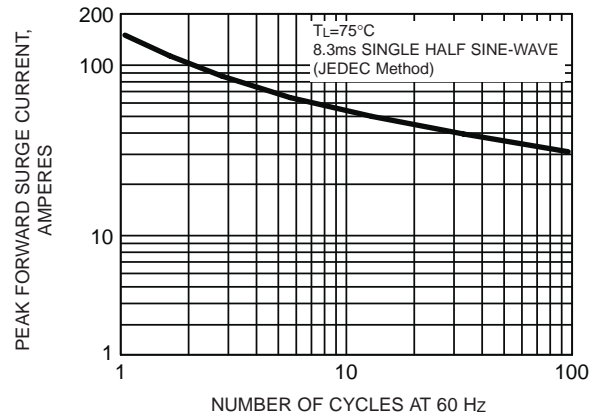


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

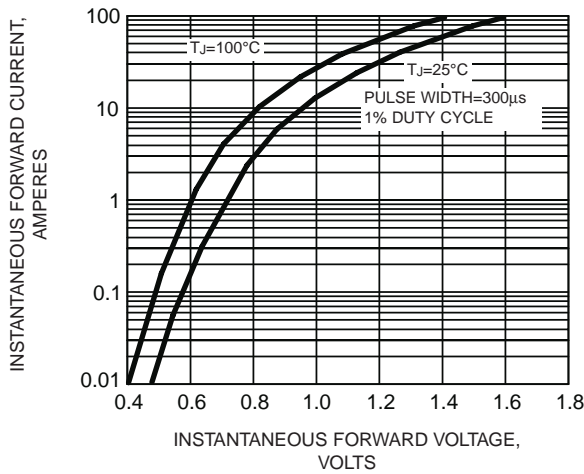


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

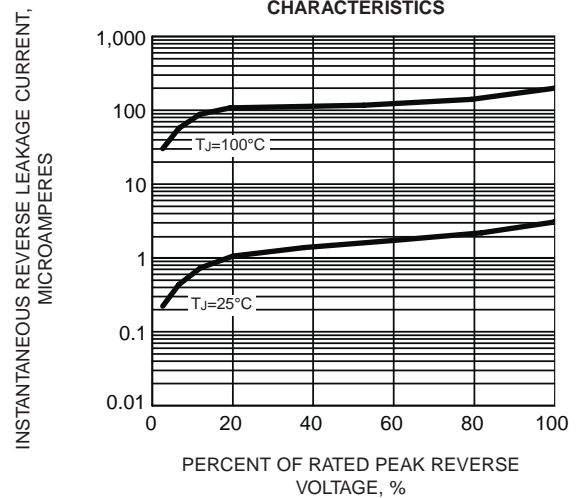


FIG. 5 - REVERSE SWITCHING CHARACTERISTICS

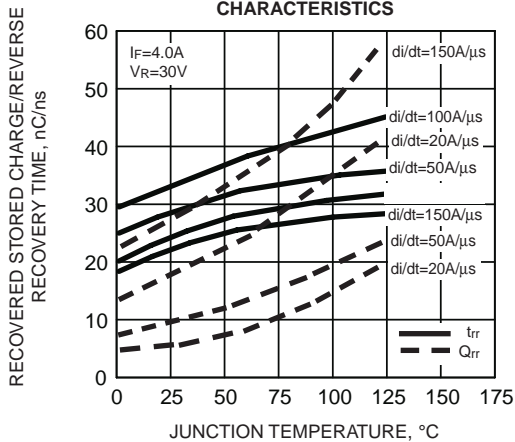


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

