

VOLTAGE RANGE: 50 - 200V

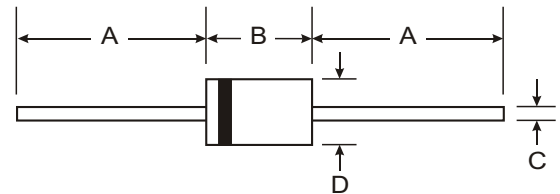
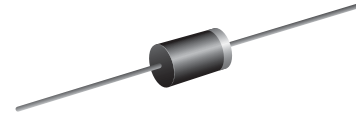
CURRENT: 1.0 A

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

Mechanical Data

- Case: DO-41 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		

Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ 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_{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 $T_A = 75^\circ\text{C}$	$I_{f(av)}$	1.0				A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{fsm}	40.0				A
Maximum Forward Voltage at Forward current 1A Peak	V_f	0.95				V
Maximum DC Reverse Current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 125^\circ\text{C}$	I_r	5.0 200.0				μA μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	15				nS
Typical Junction Capacitance (Note 2)	C_j	7.0				pF
Typical Thermal Resistance (Note 3)	$R_{(ja)}$	60.0				$^\circ\text{C/W}$
Storage and Operating Junction Temperature	T_{stg}, T_j	-55 to +150				$^\circ\text{C}$

Note:

1. Reverse Recovery Condition $I_f = 0.5\text{A}$, $I_r = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$
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

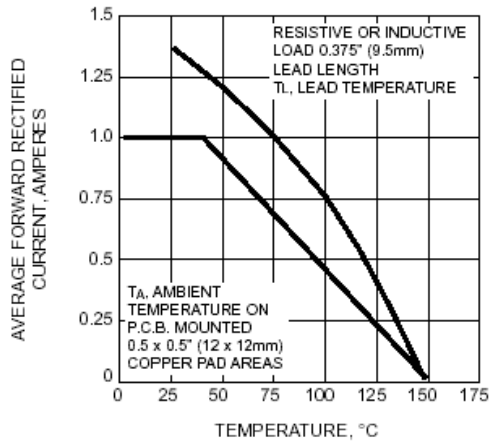


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

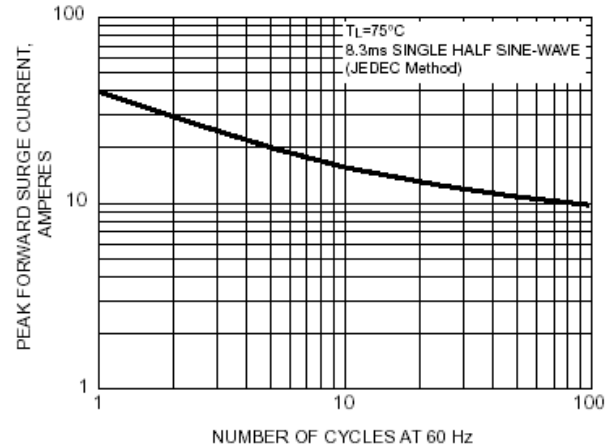


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

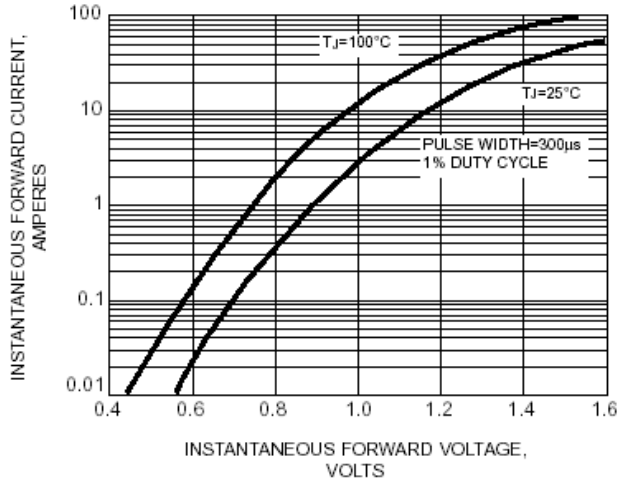


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

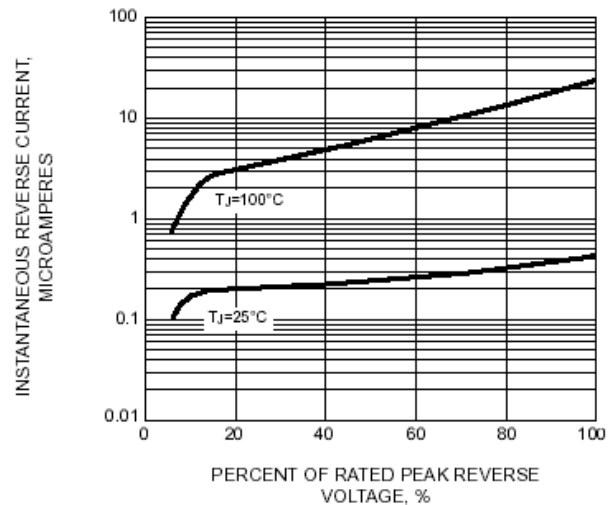


FIG. 5 - REVERSE SWITCHING CHARACTERISTICS

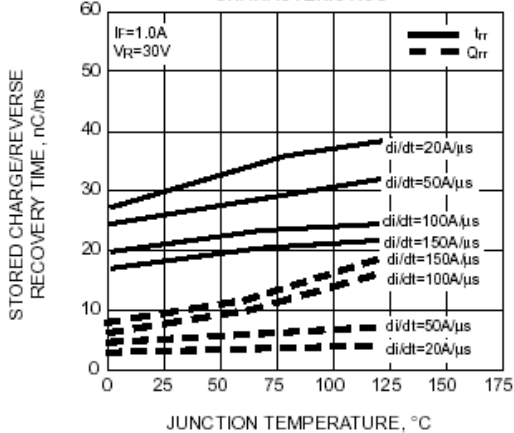


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

