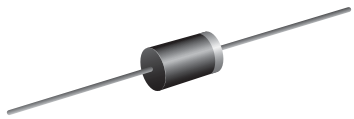
UG2A - UG2D

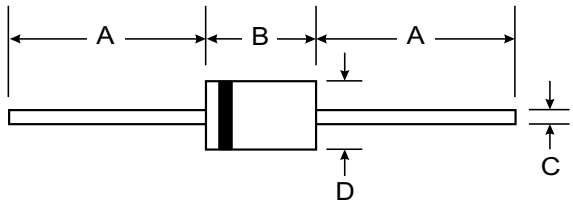
ULTRAFAST EFFICIENT PLASTIC SILICON RECTIFIER DIODES

VOLTAGE RANGE: 50 - 200V
CURRENT: 2.0 A



Features

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



DO-15		
Dim	**Min**	**Max**
A	25.40	—
B	5.50	7.62
C	0.686	0.889
D	2.60	3.60
All Dimensions in mm		

Mechanical Data

- Case : DO-15 Molded plastic
- Epoxy : UL94V-O rate flame retardant
- Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight : 0.465 gram

RoHS COMPLIANT

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	UG2A	UG2B	UG2C	UG2D	Unit
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	150	200	V
Maximum RMS Voltage	Vrms	35	70	105	140	V
Maximum DC blocking Voltage	Vdc	50	100	150	200	V
Maximum Average Forward Rectified Current 3/8″ lead length at Ta =75℃	If(av)	2.0				A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	80.0				A
Maximum Forward Voltage at Forward current 2.0A Peak	Vf	0.95				V
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =120℃	Ir	5.0 200.0				μA μA
Maximum Reverse Recovery Time (Note 1)	Trr	15				nS
Typical Junction Capacitance (Note 2)	Cj	15				pF
Typical Thermal Resistance (Note 3)	R(ja)	45				℃/W
Storage and Operating Junction Temperature	Tstg,Tj	-55 to +150				℃

Note: 1. Reverse Recovery Condition If = 0.5A, Ir =1.0A, Irr =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 UG2A THRU UG2D

FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVES

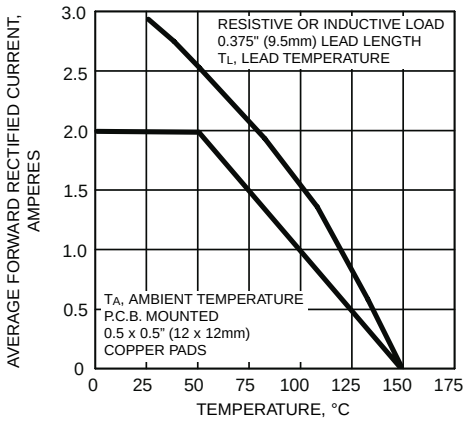


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

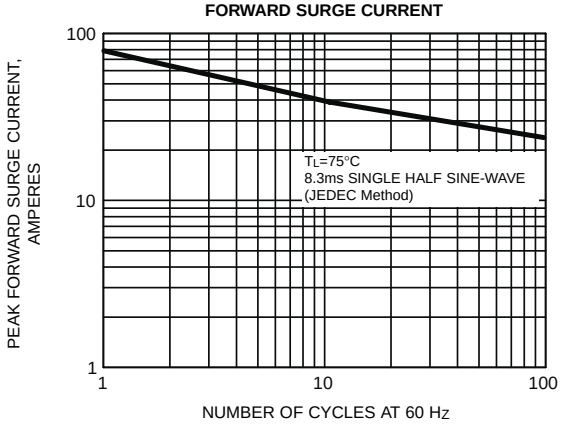


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

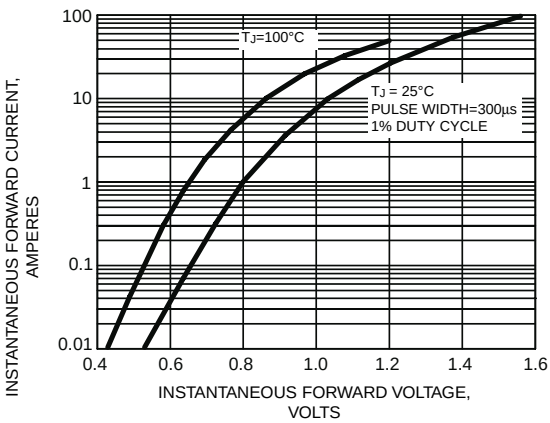


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

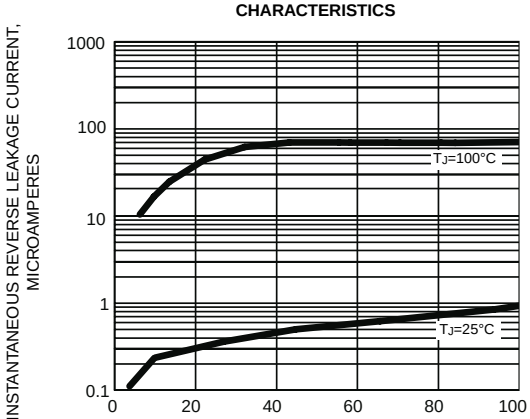


FIG. 5 - REVERSE SWITCHING CHARACTERISTICS

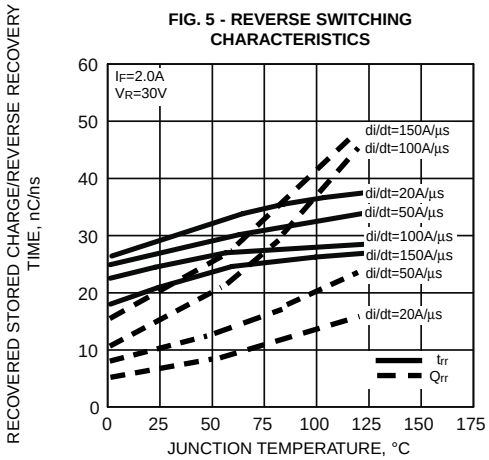


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

