



UG2D

2.0 AMP. Ultra Fast Rectifiers



Voltage Range
200 Volts
Current
2.0 Ampere

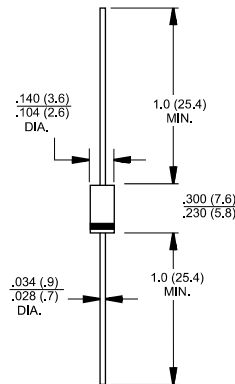
Features

- ✧ Low forward voltage drop
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability

Mechanical Data

- ✧ Cases: Molded plastic
- ✧ Epoxy: UL 94V-0 rate flame retardant
- ✧ Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: Color band denotes cathode end
- ✧ High temperature soldering guaranteed: 250°C/10 seconds/.375" (9.5mm) lead lengths at 5 lbs. (2.3kg) tension
- ✧ Weight: 0.34 gram

DO-15



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	UG2D	Units
Maximum Recurrent Peak Reverse Voltage	200	V
Maximum RMS Voltage	140	V
Maximum DC Blocking Voltage	200	V
Maximum Average Forward Rectified Current .375" (9.5mm) Lead Length @ T _L = 75°C	2.0	A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	80	A
Maximum Instantaneous Forward Voltage @ 2.0A	0.95	V
Maximum DC Reverse Current @ T _A =25°C	5.0	uA
at Rated DC Blocking Voltage @ T _A =100°C	200	uA
Maximum Reverse Recovery Time (Note 1)	15	nS
Typical Junction Capacitance (Note 2)	15	pF
Typical Thermal Resistance (Note 3) R θ JA	45	°C/W
Operating Temperature Range T _J	-65 to +150	°C
Storage Temperature Range T _{STG}	-65 to +150	°C

Notes: 1. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.

3. Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) Lead Length.

RATINGS AND CHARACTERISTIC CURVES (UG2D)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

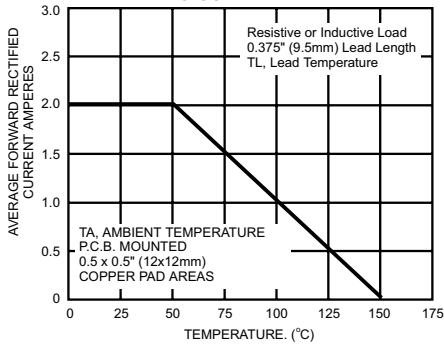


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

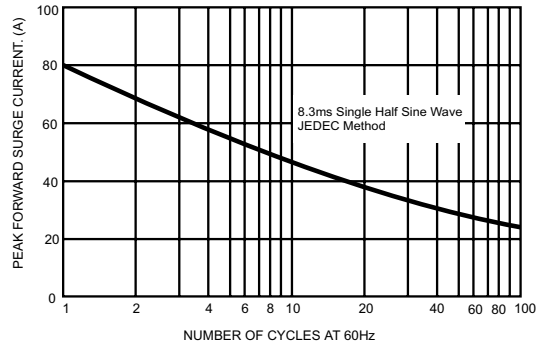


FIG.3- TYPICAL FORWARD CHARACTERISTICS

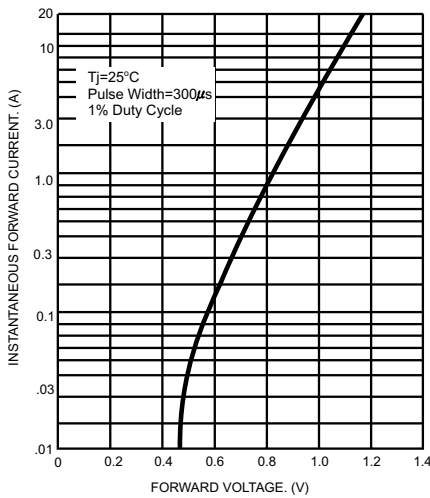


FIG.4- TYPICAL JUNCTION CAPACITANCE

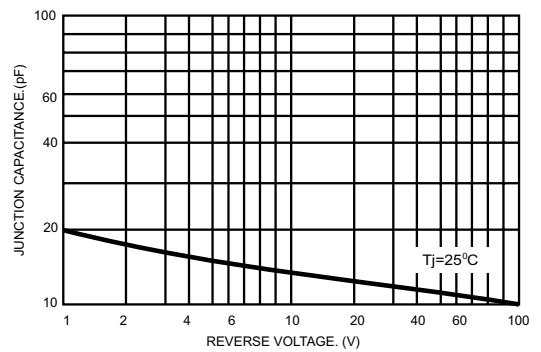


FIG.5- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

