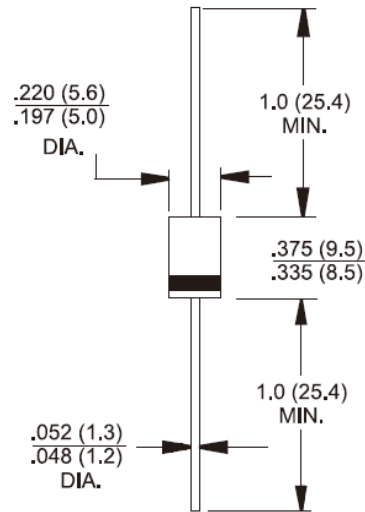


DO-201AD

Dimensions in inches and (millimeters)
Marking Diagram


UG58G	= Specific Device Code
G	= Green Compound
Y	= Year
WW	= Work Week

Features

- ◇ High efficiency, low VF
- ◇ High current capability
- ◇ High reliability
- ◇ High surge current capability
- ◇ Low power loss
- ◇ For use in low voltage, high frequency inverter, Free wheeling, and polarity protection application
- ◇ Green compound with suffix "G" on packing code & prefix "G" on datecode

Mechanical Data

- ◇ Case: Molded plastic
- ◇ Epoxy: UL 94V-0 rate flame retardant
- ◇ Lead: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- ◇ Polarity: As marked
- ◇ High temperature soldering: 260°C/10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- ◇ Mounting position: Any
- ◇ Weight: 1.2 grams

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	Symbol	UG58G	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS Voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length	$I_{F(AV)}$	5.0	A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150	A
Maximum Instantaneous Forward Voltage @ 5.0A	V_F	1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage (Note 1)	I_R	5 100	uA
Maximum Reverse Recovery Time (Note 2)	T_{rr}	25	nS
Typical Junction Capacitance (Note 3)	C_j	60	pF
Typical Thermal Resistance (Note 4)	$R_{\theta jL}$	15	°C/W
Operating Temperature Range	T_J	- 65 to + 150	°C
Storage Temperature Range	T_{STG}	- 65 to + 150	°C

Note 1: Pulse Test with PW=300 usec, 1% Duty Cycle

 Note 2: Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$

Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

Note 4: Mount on Cu-Pad Size 16mm x 16mm on P.C.B.

RATINGS AND CHARACTERISTIC CURVES (UG58G)

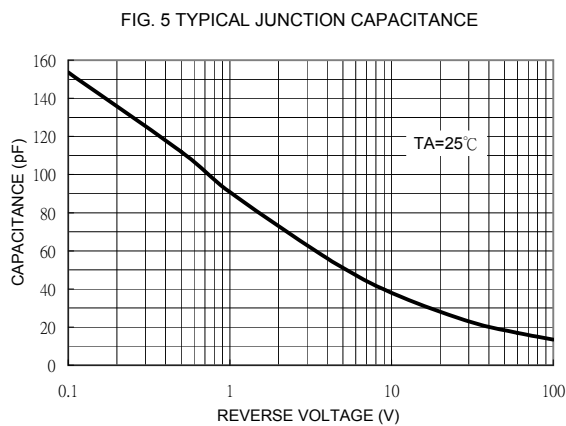
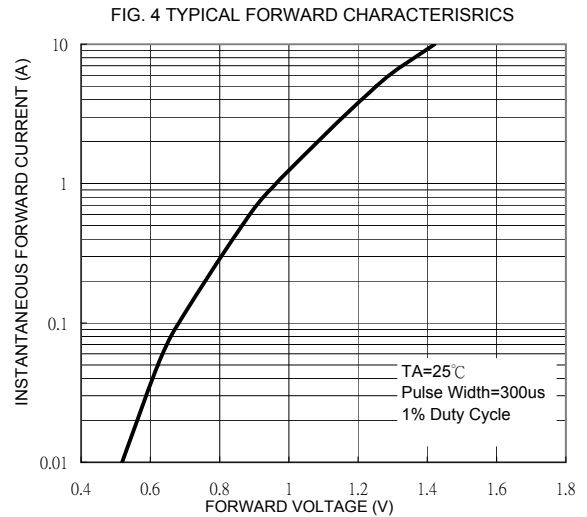
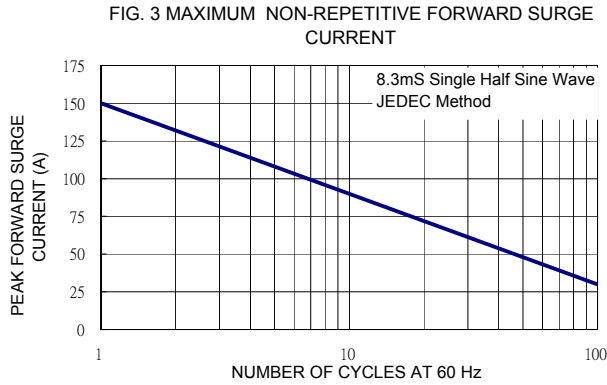
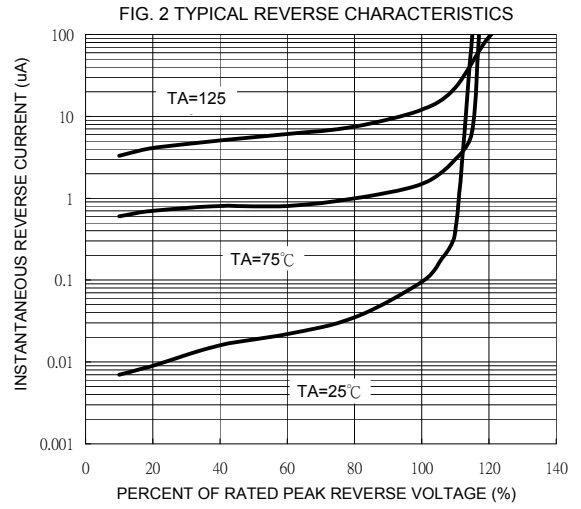
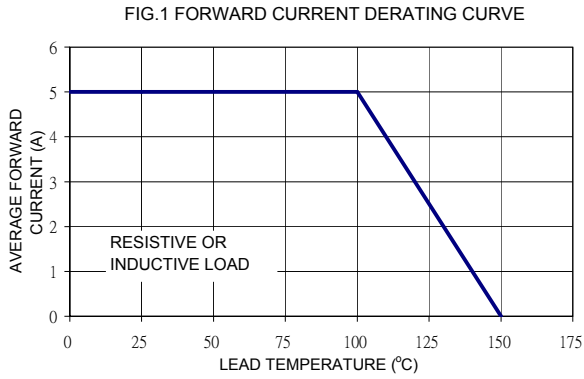


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

