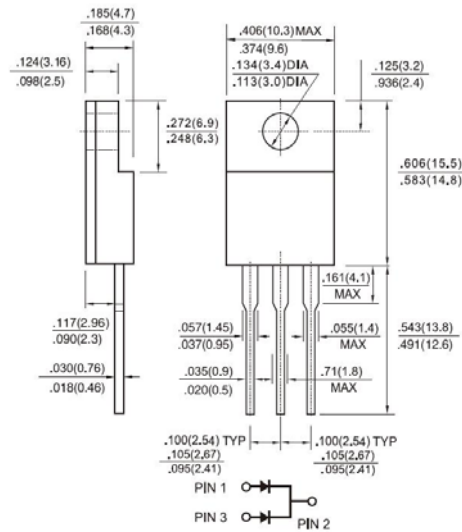




UGF1606G
16.0AMPS. Isolated Glass Passivated Super Fast Rectifiers
ITO-220AB

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, Freewheeling, and polarity protection application
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode



Mechanical Data

- ✧ Case: ITO-220AB
- ✧ Epoxy: UL 94V-0 rate flame retardant
- ✧ Terminals: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: As marked
- ✧ High temperature soldering guaranteed: 260°C/10 seconds.
- ✧ Weight: 2.24 grams

Dimensions in inches and (millimeters)

Marking Diagram



- P/N = Specific Device Code
 G = Green Compound
 Y = Year
 WW = Work Week

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	UGF1606G	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	400	V
Maximum RMS Voltage	V_{RMS}	280	V
Maximum DC Blocking Voltage	V_{DC}	400	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	16	A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	90	A
Maximum Instantaneous Forward Voltage (Note 1) @ 8 A / $T_A=25^{\circ}C$	V_F	1.25	V
Maximum DC Reverse Current at Rated $T_A=25^{\circ}C$ DC Blocking Voltage $T_A=125^{\circ}C$	I_R	10 100	μA
Maximum Reverse Recovery Time (Note 2)	T_{rr}	25	nS
Typical Thermal Resistance	$R_{\theta JC}$	5	$^{\circ}C/W$
Operating Temperature Range	T_J	- 55 to + 175	$^{\circ}C$
Storage Temperature Range	T_{STG}	- 55 to + 175	$^{\circ}C$

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

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

RATINGS AND CHARACTERISTIC CURVES (UGF1606G)

FIG.1 FORWARD CURRENT DERATING CURVE

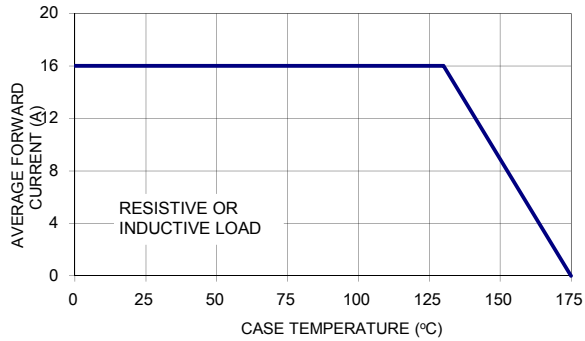


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

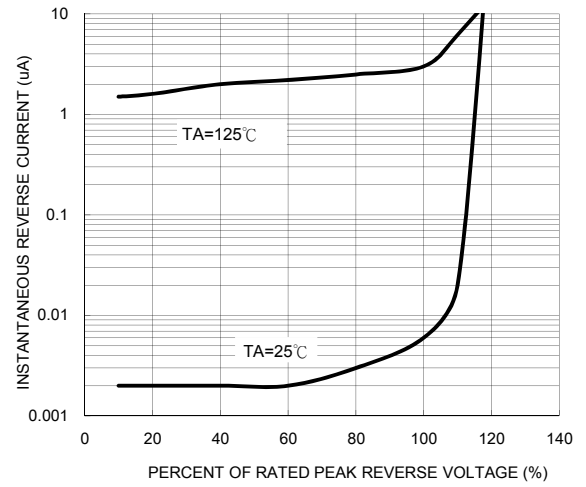


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

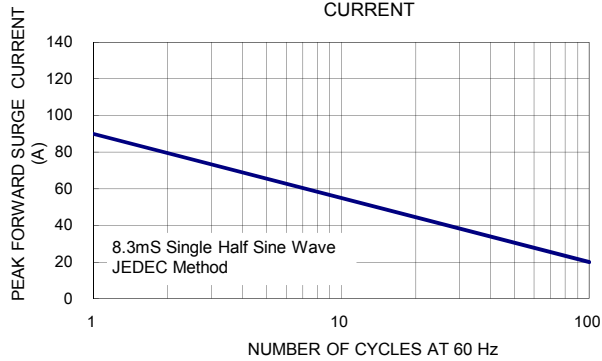


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

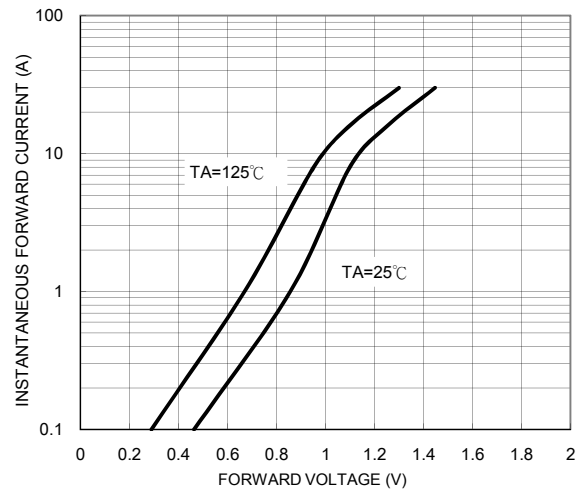


FIG. 5 TYPICAL JUNCTION CAPACITANCE

