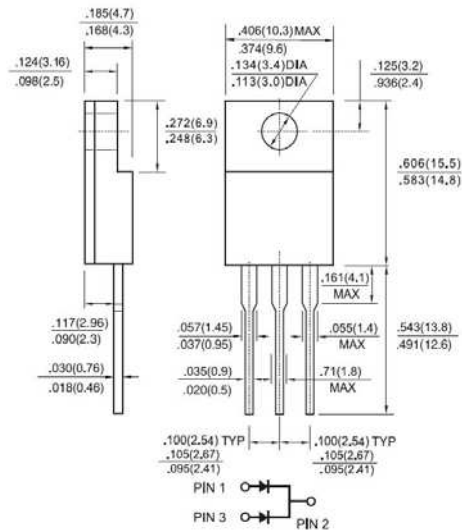


UGF1004G - UGF1006G
 10.0AMPS. Isolated Glass Passivated Super Fast Rectifiers
ITO-220AB

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	UGF1004G	UGF1005G	UGF1006G	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	300	400	V
Maximum RMS Voltage	V_{RMS}	140	210	280	V
Maximum DC Blocking Voltage	V_{DC}	200	300	400	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	10			A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	70			A
Maximum Instantaneous Forward Voltage (Note 1) @ 5 A / $T_A=25^\circ C$	V_F	0.95	1.25		V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A=25^\circ C$ / $T_A=125^\circ C$	I_R	10 / 100			uA
Maximum Reverse Recovery Time (Note 2)	T_{rr}	25			nS
Typical Thermal Resistance	$R_{\theta JC}$	6			$^\circ C/W$
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 (UGF1004G THRU UGF1006G)

FIG. 1 FORWARD CURRENT DERATING CURVE

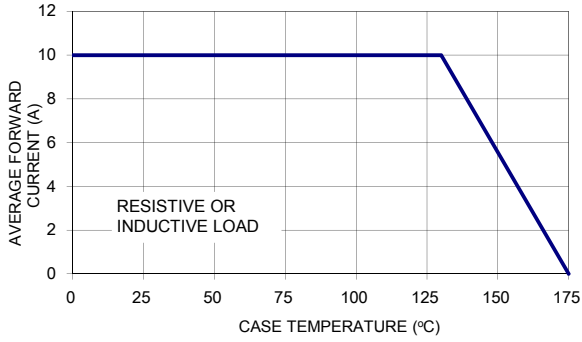


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

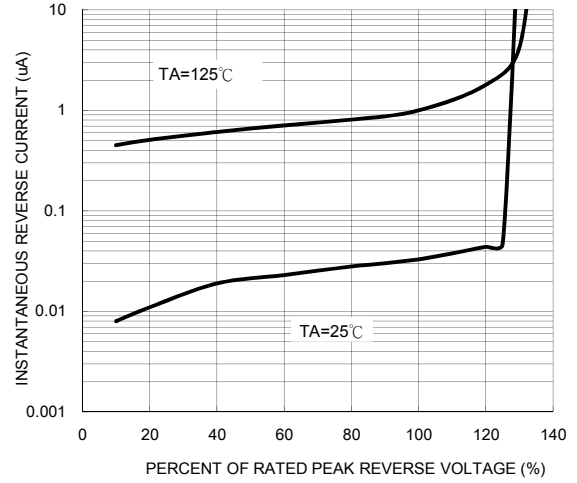


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

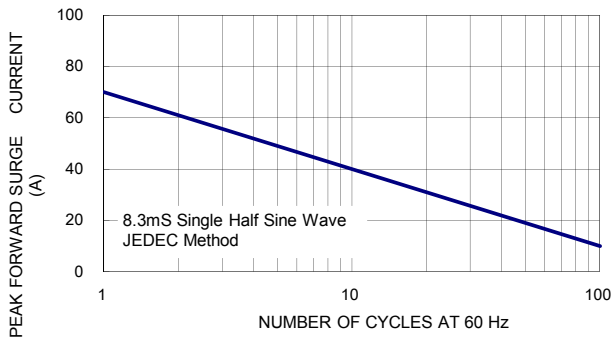


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

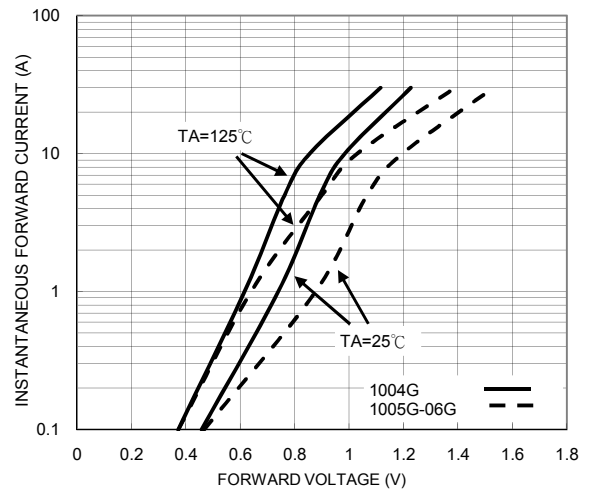


FIG. 5 TYPICAL JUNCTION CAPACITANCE

