

Pb Free Plating Product

UGF1004GA thru UGF1008GA



10 Ampere Insulated Common Anode Ultra Fast Recovery Half Bridge Rectifiers

Features

- ★ Latest GPP technology with ultra fast recovery time
- ★ Low forward voltage drop
- ★ High current capability
- ★ Low reverse leakage current
- ★ High surge current capability

Application

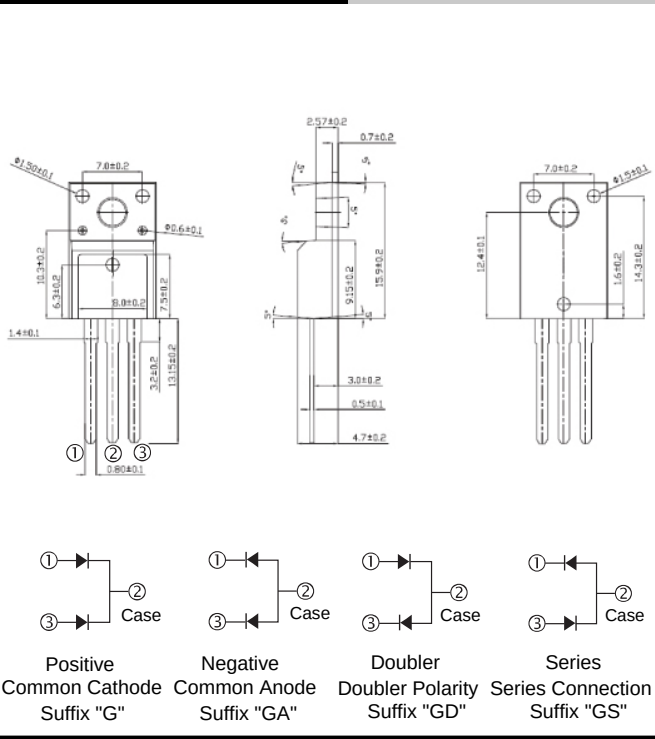
- ★ Automotive Inverters and Solar Inverters
- ★ Plating Power Supply, SMPS and UPS
- ★ Car Audio Amplifiers and Sound Device Systems

Mechanical Data

- ★ Case: Fully Insulated TO-220FP FullPak Plastic
- ★ Epoxy: UL 94V-0 rate flame retardant
- ★ Terminals: Solderable per MIL-STD-202 method 208
- ★ Polarity: As marked on diode body
- ★ Mounting position: Any
- ★ Weight: 2.0 gram approximately

ITO-220AB

Unit:mm



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)							
PARAMETER	SYMBOL	UGF1004GA	UGF1005GA	UGF1006GA	UGF1007GA	UGF1008GA	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	200	300	400	500	600	V
Maximum RMS voltage	V _{RMS}	140	210	280	350	420	V
Maximum DC blocking voltage	V _{DC}	200	300	400	500	600	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	I _{FSM}	70					A
Maximum instantaneous forward voltage (Note 2) I _F = 5 A	V _F	0.95	1.25		1.70		V
Maximum reverse current @ rated VR T _J =25 °C 							

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

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

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG. 1 FORWARD CURRENT DERATING CURVE

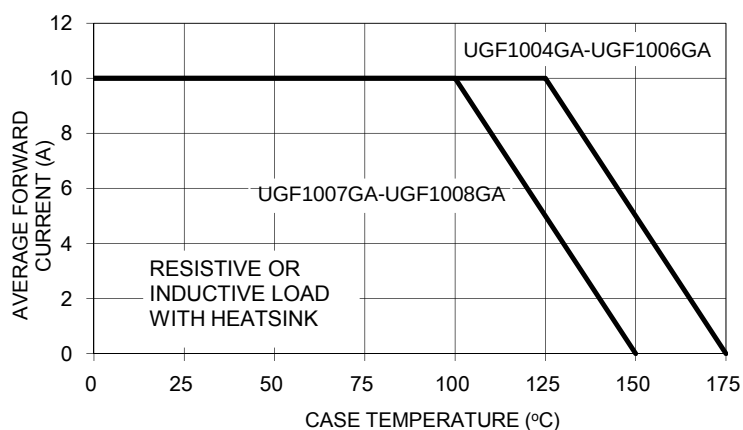


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

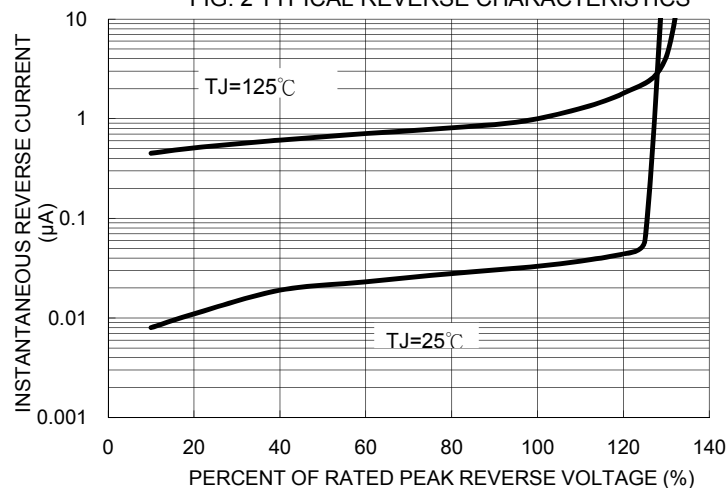


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

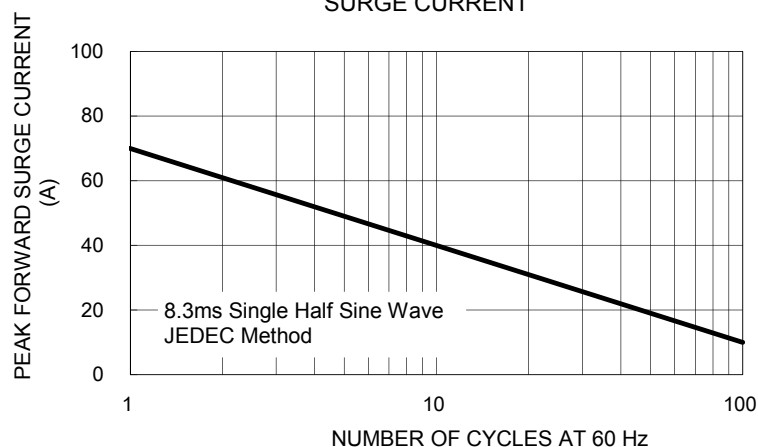


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

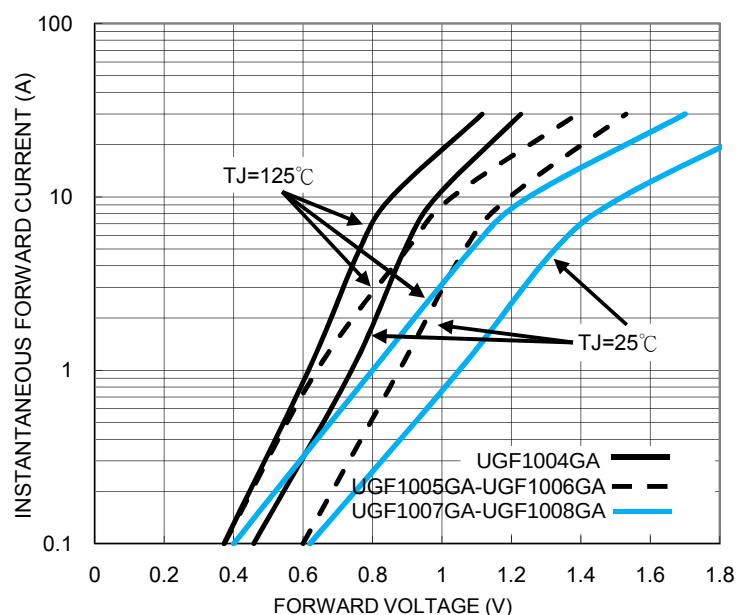


FIG. 5 TYPICAL JUNCTION CAPACITANCE

