FR107GE

FAST RECOVERY
GLASS PASSIVATED RECTIFIER

VOLTAGE: 1000V **CURRENT:1.0A**

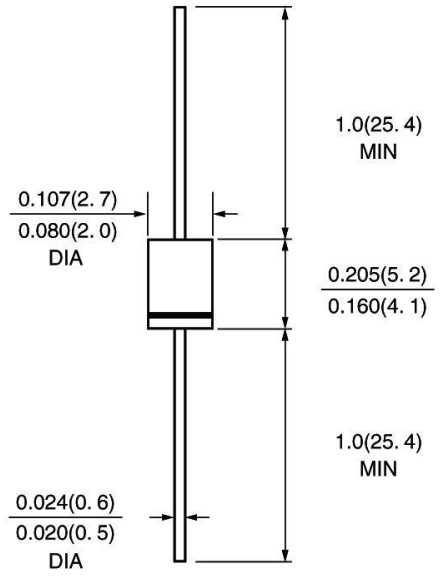
FEATURE

Molded case feature for auto insertion
High current capability
Low leakage current
High surge capability
High temperature soldering guaranteed
Fast switching for high efficiency
Glass passivated junction

MECHANICAL DATA

Terminal: Plated axial leads solderable per J-STD-002
Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity: color band denotes cathode
Mounting position: any

A-405



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	Symbol	FR107GE	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	1000	V
Maximum RMS Voltage	Vrms	700	V
Maximum DC blocking Voltage	Vdc	1000	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =75℃	If(av)	1.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	30	A
Maximum Forward Voltage at rated Forward Current	Vf	1.3	V
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =150℃	Ir	5.0 300	μA
Maximum Reverse Recovery Time (Note 1)	Trr	500	nS
Typical Junction Capacitance (Note 2)	Cj	17	pF
Typical Thermal Resistance (Note 3)	Rth(ja)	60	℃/W
Storage and Operating Junction Temperature	Tstg,Tj	-50 to +150	℃

Note:

1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 0.375"lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES FR107GE

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

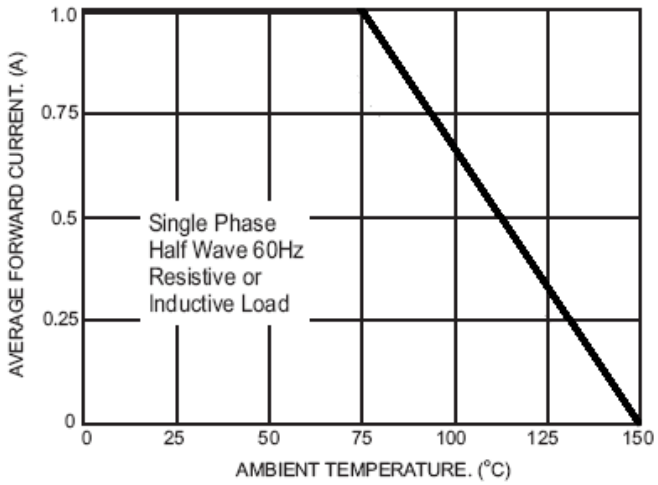


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

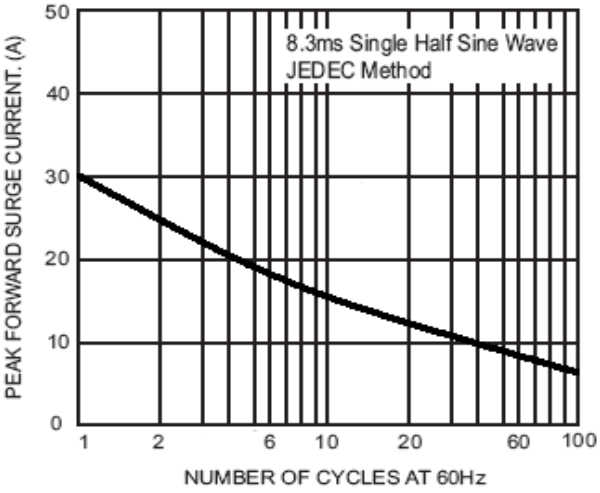


FIG.3- TYPICAL FORWARD CHARACTERISTICS

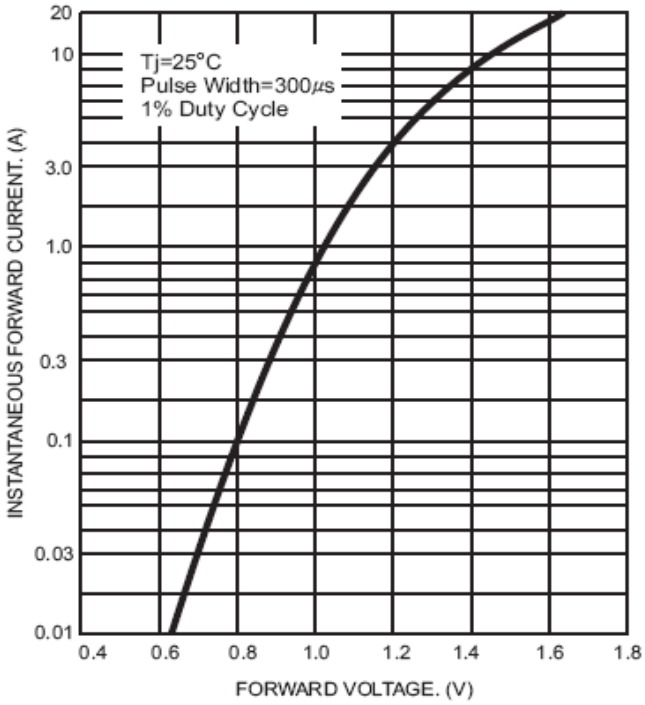


FIG.4- TYPICAL REVERSE CHARACTERISTICS

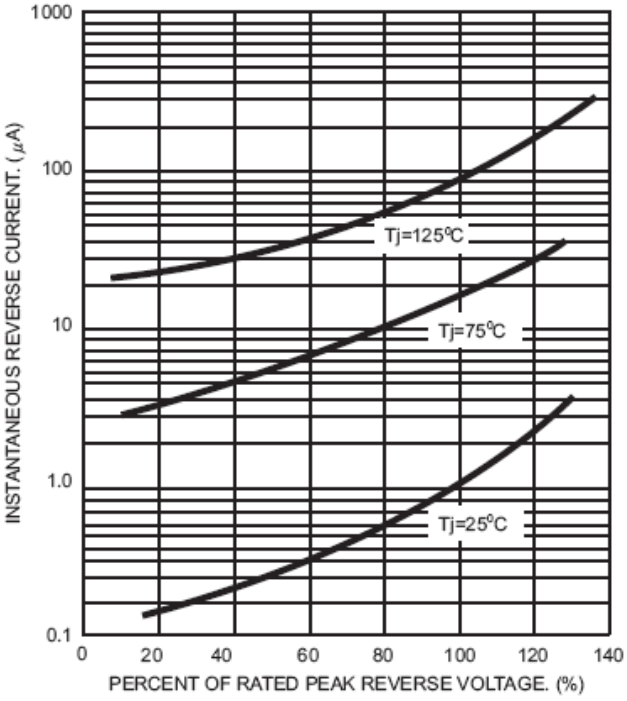


FIG.5- TYPICAL JUNCTION CAPACITANCE