FR107-15C

FAST SWITCHING PLASTIC 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
250°C10sec/0.375”lead length at 5 lbs tension
Fast switching for high efficiency

MECHANICAL DATA

Terminal：Plated axial leads solderable per MIL-STD 202E, method 208C
Case：Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity：color band denotes cathode
Mounting position：any

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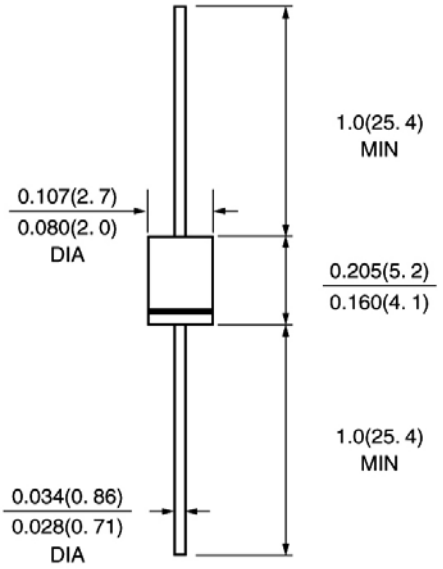

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	FR107-15C	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°C	If(av)	1.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	30.0	A
Maximum Forward Voltage at rated Forward Current and 25°C	Vf	1.3	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =100°C	Ir	5.0 100.0	μA
Maximum Reverse Recovery Time (Note 1)	Trr	500	nS
Typical Junction Capacitance (Note 2)	Cj	15.0	pF
Typical Thermal Resistance (Note 3)	Rth(ja)	50.0	°C/W
Storage and Operating Junction Temperature	Tstg,Tj	-50 to +150	°C

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 FR107-15C

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

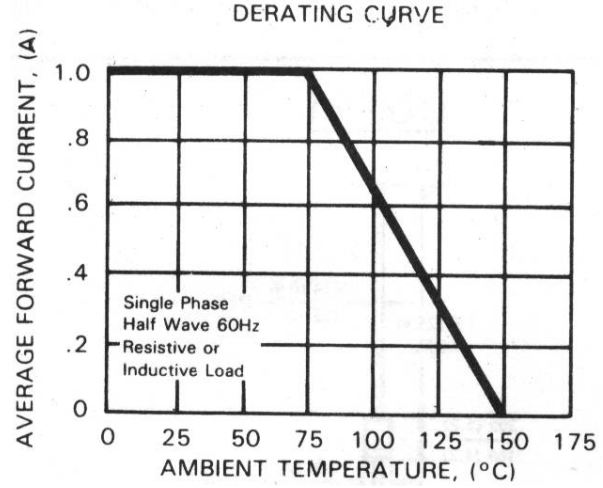

FIG. 2 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

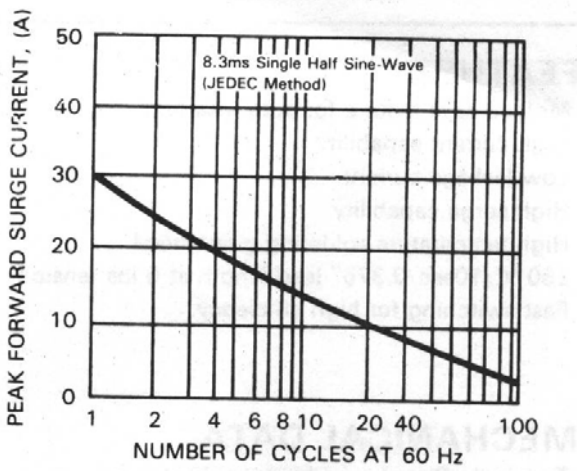

FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

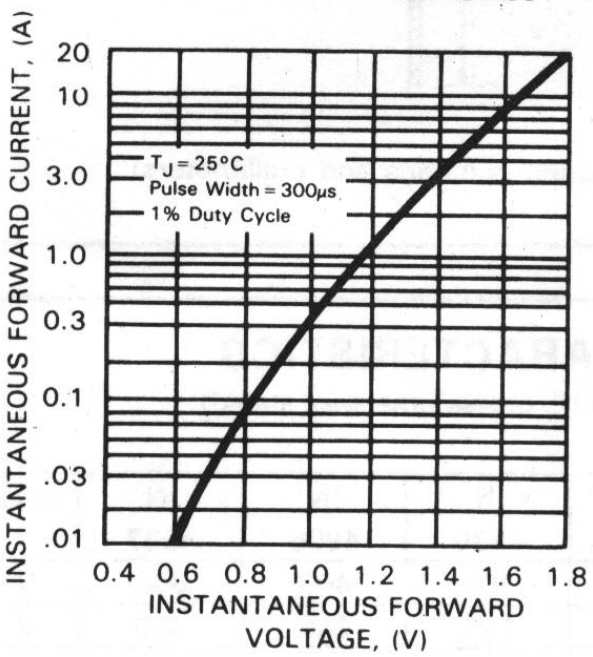

FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

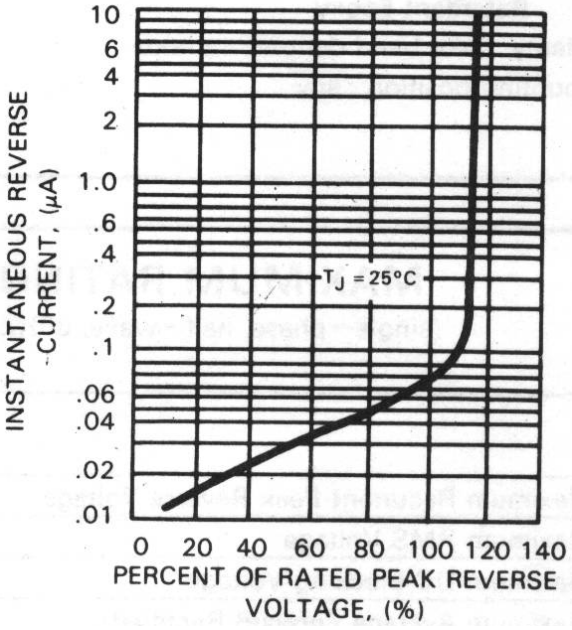

FIG. 5 - TYPICAL JUNCTION CAPACITANCE