FR201X

FAST SWITCHING PLASTIC RECTIFIER

VOLTAGE: 60V **CURRENT: 2.0A**

FEATURE

Molded case feature for auto insertion
High current capability
Low leakage current
High surge capability, Low turn on voltage
High temperature soldering guaranteed
250°C/10sec/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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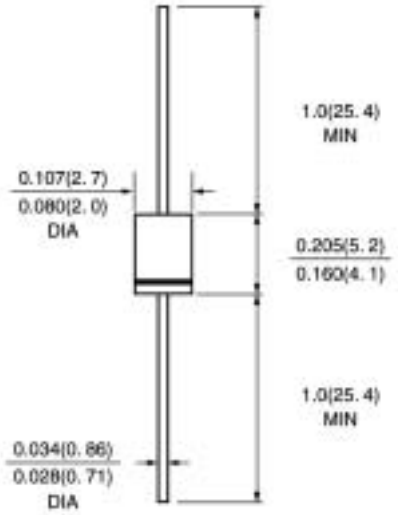

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	FR201X	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	60	V
Maximum RMS Voltage	Vrms	42	V
Maximum DC blocking Voltage	Vdc	60	V
Maximum Average Forward Rectified Current 3/8”lead length at Ta =75°C	If(av)	2.0	A
Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	Ifsm	70.0	A
Maximum Forward Voltage at rated Forward Current and 25°C at IF =2A	Vf	1.0	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =100°C	Ir	5.0 100.0	μA μA
Maximum Reverse Recovery Time (Note 1)	Trr	100	nS
Typical Junction Capacitance (Note 2)	Cj	40.0	pF
Typical Thermal Resistance (Note 3)	R(ja)	40.0	°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 FR201X

[1]

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

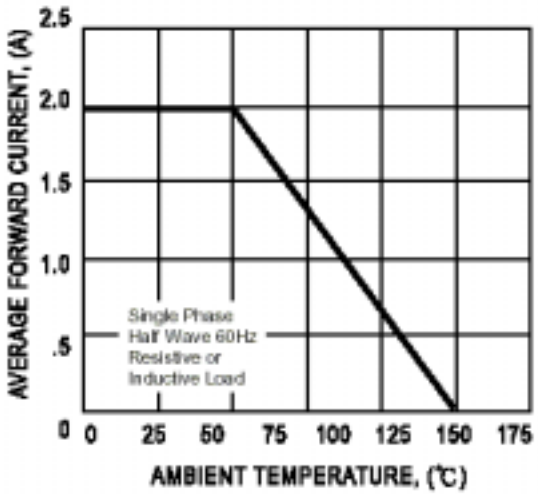

FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

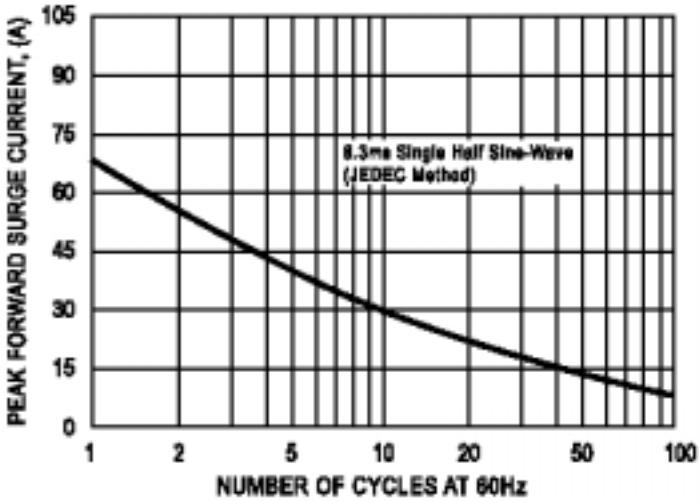

FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

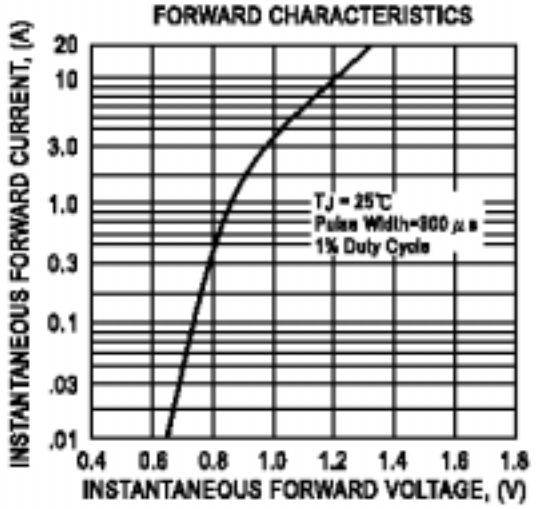

FIG. 4 - TYPICAL JUNCTION CAPACITANCE