

# FR101~FR107

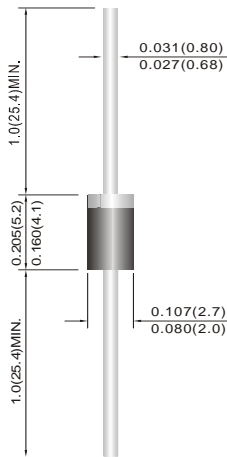
## FAST RECOVERY PLASTIC RECTIFIER

**VOLTAGE 50 to 1000 Volts    CURRENT 1.0 Amperes**



DO-41

Unit: inch(mm)



### FEATURES

- High current capability.
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Low leakage.
- Exceeds environmental standards of MIL-S-19500/228
- Fast switching for high efficiency.
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

### MECHANICAL DATA

Case: Molded plastic, DO-41

Terminals: Axial leads, solderable to MIL-STD-202G, Method 208

Polarity: Color Band denotes cathode end

Mounting Position: Any

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	FR101	FR102	FR103	FR104	FR105	FR106	FR107	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Current .375"(9.5mm) lead length at TA=55°C	I <sub>AV</sub>	1.0							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I <sub>FSM</sub>	30							A
Maximum Forward Voltage at 1.0A	V <sub>F</sub>	1.3							V
Maximum DC Reverse Current TA=25°C at Rated DC Blocking Voltage TA=100°C	I <sub>R</sub>	5.0 500							uA
Maximum Reverse Recovery Time (Note 1)	T <sub>RR</sub>	150				250	500		ns
Typical Junction capacitance (Note 2)	C <sub>J</sub>	12							pF
Typical Thermal Resistance (Note 3)	R <sub>θJA</sub>	41							°C / W
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 TO +150							°C

NOTES: 1. Reverse Recovery Test Conditions: I<sub>F</sub>=.5A, I<sub>R</sub>=1A, I<sub>rr</sub>=.25A

2. Measured at 1 MHz and applied reverse voltage of 4.0 VDC

3. Thermal resistance from junction to ambient at 0.375"(9.5mm) lead length with both leads equally heatsink.

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## RATING AND CHARACTERISTIC CURVES

