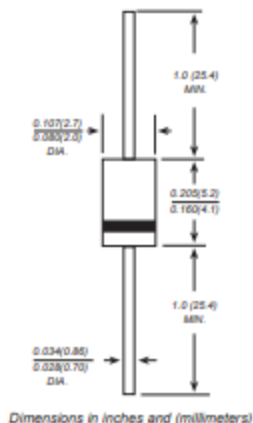# FR101 THRU FR107

FAST RECOVERY RECTIFIERS

Reverse Voltage - 50 to 1000 Volts   Forward Current - 1.0 Ampere

DO-41

Dimensions in inches and (millimeters)

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Fast switching for high efficiency
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 260℃/10 seconds,0.375″(9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC DO-41 molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight:0.012 ounce, 0.33 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

	SYMBOLS	FR 101	FR 102	FR 103	FR 104	FR 105	FR 106	FR 107	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current 0.375″(9.5mm) lead length at T_A=75℃	$I_{(AV)}$				1.0				Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}				30.0				Amps
Maximum instantaneous forward voltage at 1.0A	V_F				1.3				Volts
Maximum DC reverse current T_A=25℃ at rated DC blocking voltage T_A=100℃	I_R				5.0 50.0				μA
Maximum reverse recovery time (NOTE 1)	t_{rr}		150			250	500		ns
Typical junction capacitance (NOTE 2)	C_J				15.0				pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$				50.0				℃/W
Operating junction and storage temperature range	T_J, T_{STG}				-65 to +150				℃

Note:1.Reverse recovery condition I_F=0.5A,I_R=1.0A,I_{rr}=0.25A
2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3.Thermal resistance from junction to ambient at 0.375″(9.5mm)lead length,P.C.B. mounted