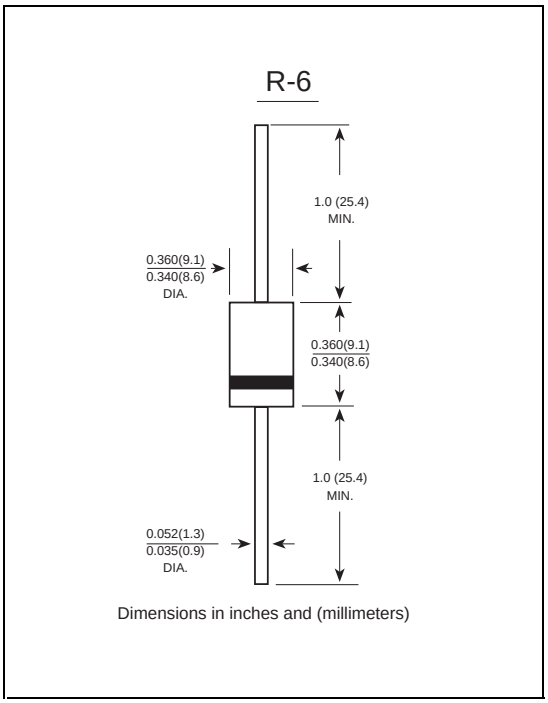
FR801 ~FR807

8.0Amp Fast Recovery Rectifiers

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: 250°C/10 seconds,0.375"(9.5mm) lead length, 5 lbs. (2.3kg) tension



Dimensions in inches and (millimeters)

Mechanical Data

Case: R-6 molded plastic body
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight : 0.072 ounce, 2.05 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 801	FR 802	FR 803	FR 804	FR 805	FR 806	FR 807	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°C	$I_{(AV)}$	8.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	300.0							Amps
Maximum instantaneous forward voltage at 8.0A	V_F	1.3							Volts
Maximum DC reverse current T_A =25℃ at rated DC blocking voltage T_A=100℃	I_R	10.0 200.0							u A
Maximum reverse recovery time (Note 1)	Trr	150				250	500		ns
Typical junction capacitance (Note 2)	C_J	150.0							pF
Typical thermal resistance (Note 3)	R_{qJA}	10.0							°C/W
Operating junction and storage temperature range	T_J,T_{STG}	-65 to +150							°C

Note: 1.Reverse recovery condition I_F=0.5A,I_R =1.0A,Irr=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