

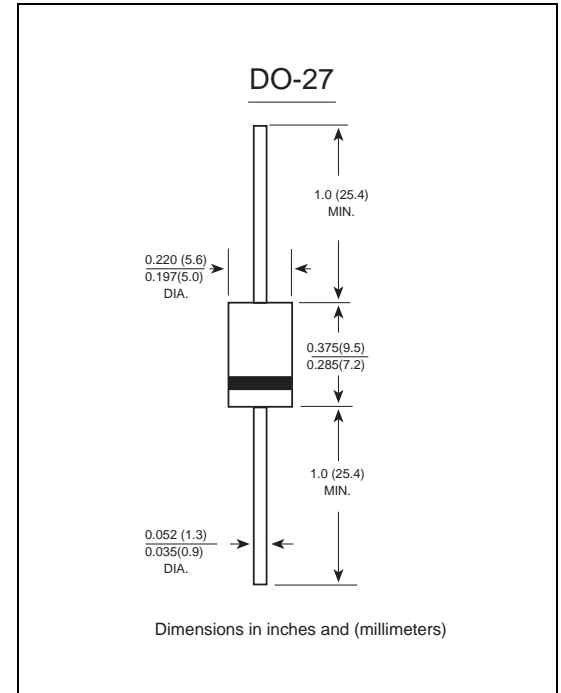
FR301 ~FR307 3.0Amp Fast Recovery Rectifiers

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

Mechanical Data

Case: JEDEC DO-27 molded plastic body
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight : 0.04 ounce, 1.10 grams



Maximum Ratings And Electrical Characteristics

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

	SYMBOLS	FR 301	FR 302	FR 303	FR 304	FR 305	FR 306	FR 307	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)	3.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	200.0							Amps
Maximum instantaneous forward voltage at 3.0A	V _F	1.3							Volts
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	5.0 100.0							uA
Maximum reverse recovery time (Note 1)	T _{rr}	150				250	500		ns
Typical junction capacitance (Note 2)	C _J	60.0							pF
Typical thermal resistance (Note 3)	R _{qJA}	40.0							°C/W
Operating junction and storage temperature range	T _J ,T _{STG}	-65 to +150							°C

Note1. 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