

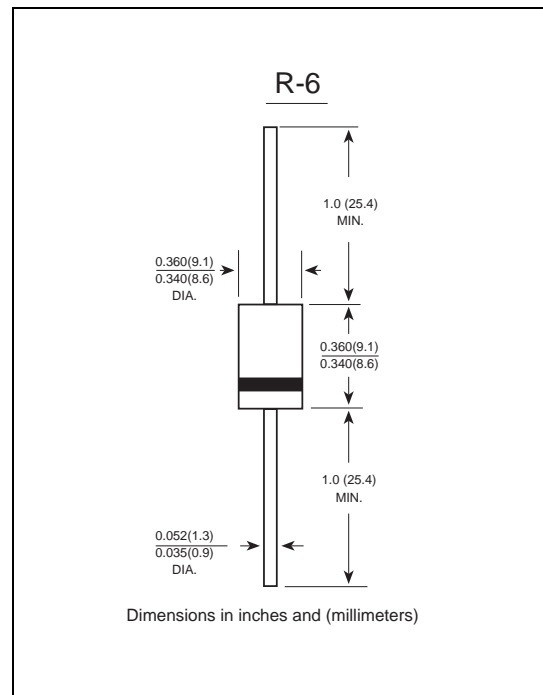
## FR601 ~FR607 6.0Amp Fast Recovery Rectifiers

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

	SYMBOLS	FR 601	FR 602	FR 603	FR 604	FR 605	FR 606	FR 607	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 $T_A = 75^\circ C$	$I_{AV}$	6.0							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 6.0A	$V_F$	1.3							Volts
Maximum DC reverse current $T_A = 25^\circ C$ at rated DC blocking voltage $T_A = 100^\circ C$	$I_R$	10.0 200.0							uA
Maximum reverse recovery time (Note 1)	$T_{rr}$	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  $I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A$

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