



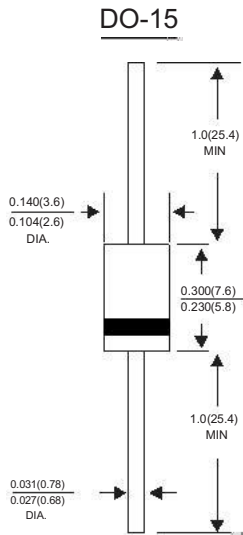
# FR 201 THRU FR 207

## FAST RECOVERY RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 2.0 Ampere

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



### MECHANICAL DATA

**Case:** JEDEC DO-15 molded plastic body

**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 0.014 ounce, 0.40 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 201	FR 202	FR 203	FR 204	FR 205	FR 206	FR 207	UNITS
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current 0.375" (9.5mm) lead length at TA=75 °C	I(AV)	2.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	70.0							Amps
Maximum instantaneous forward voltage at 2.0A	V <sub>F</sub>	1.3							Volts
Maximum DC reverse current TA=25 °C at rated DC blocking voltage TA=100 °C	I <sub>R</sub>	5.0 100.0							uA
Maximum reverse recovery time (NOTE 1)	t <sub>rr</sub>	150		250		500		ns	
Typical junction capacitance (NOTE 2)	C <sub>J</sub>	40.0							pF
Typical thermal resistance (NOTE 3)	R <sub>JA</sub>	40.0							°C/W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-60 to +150							°C

- Note:**
- 1.Reverse recovery condition I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>rr</sub>=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



RATINGS AND CHARACTERISTIC CURVES FR201 THRU FR207

