

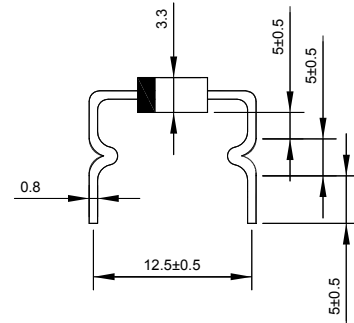
FR201 THRU FR207(F.L.)

Fast Recovery Rectifiers
Reverse Voltage – 50 to 1000 V
Forward Current – 2.0 A

DO-15 (F.L.)

Features

- High Current Capability
- Fast switching for high efficiency
- Low Leakage



Dimensions in mm

Mechanical Data

- **Case:** Molded plastic, DO-15
- **Lead:** Axial leads, solderable per MIL-STD-750, method 2026 guaranteed.
- **Polarity:** Color band denotes cathode end
- **Mounting Position:** Any

Absolute Maximum Ratings and Characteristics

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

Parameter	Symbols	FR 201	FR 202	FR 203	FR 204	FR 205	FR 206	FR 207	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Average Forward Rectified Current 0.375" (9.5 mm) Lead Length at $T_A = 55^\circ\text{C}$	$I_{F(AV)}$	2							A
Peak Forward Surge Current 8.3 ms Single Half sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	70							A
Maximum Forward Voltage at 2 A	V_F	1.3							V
Maximum Reverse Current $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A = 100^\circ\text{C}$	I_R	5 500							μA
Maximum Reverse Recovery Time ¹⁾	t_{rr}	150			250		500		ns
Typical Junction Capacitance ²⁾	C_J	35							pF
Typical Thermal Resistance ³⁾	$R_{\theta JA}$	22							$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{stg}	- 55 to + 150							$^\circ\text{C}$

¹⁾ Reverse recovery test conditions: $I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $I_{rr} = 0.25\text{ A}$.

²⁾ Measured at 1 MHz and applied reverse voltage of 4 V

³⁾ Thermal resistance junction to ambient and from junction to lead at 0.375" (9.5 mm) lead length P.C.B. mounted.

