

FR2A THRU FR2M

Surface Mount Fast Recovery Rectifier

Reverse Voltage - 50 to 1000 V

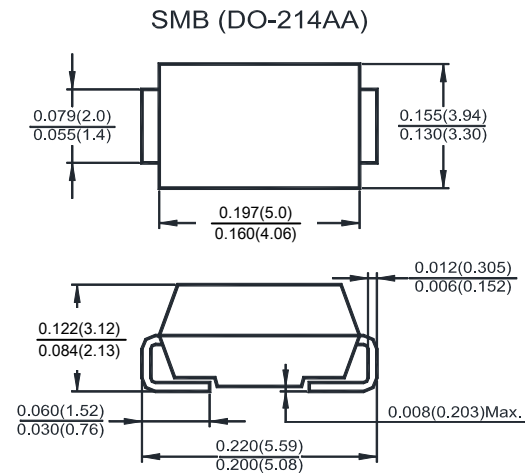
Forward Current - 2 A

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Fast switching for high efficiency
- Low reverse leakage
- High forward surge current capability
- For surface mounted applications

Mechanical Data

- **Case:** Molded plastic, DO-214AA (SMB).
- **Terminals:** Solder plated, solderable per MIL-STD-750, method 2026
- **Polarity:** Color band denotes cathode end



Dimensions in inches and (millimeters)

Absolute Maximum Ratings and Characteristics

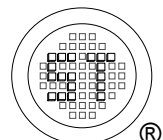
Ratings at $T_a = 25^\circ\text{C}$ ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	Symbols	FR2A	FR2B	FR2D	FR2G	FR2J	FR2K	FR2M	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 at T _L = 90 °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}	50							A
Maximum Instantaneous Forward Voltage at 2 A	V _F	1.3							V
Maximum Reverse Current T _a = 25°C at Rated DC Blocking Voltage T _a = 100 °C	I _R	5 50							µA
Maximum Reverse Recovery Time ¹⁾	t _{rr}	150				250	500		ns
Typical Junction Capacitance ²⁾	C _J	50							pF
Typical Thermal Resistance ³⁾	R _{θJA}	20							°C/W
Operating Junction and Storage Temperature Range	T _J , T _{stg}	- 55 to + 150							°C

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

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

³⁾ P.C.B with 0.2 X 0.2" (5 X 5 mm) copper pad areas.



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