

RS2AD THRU RS2MD

Surface Mount Fast Recovery Rectifiers

Reverse Voltage – 50 to 1000 V

Forward Current – 2 A

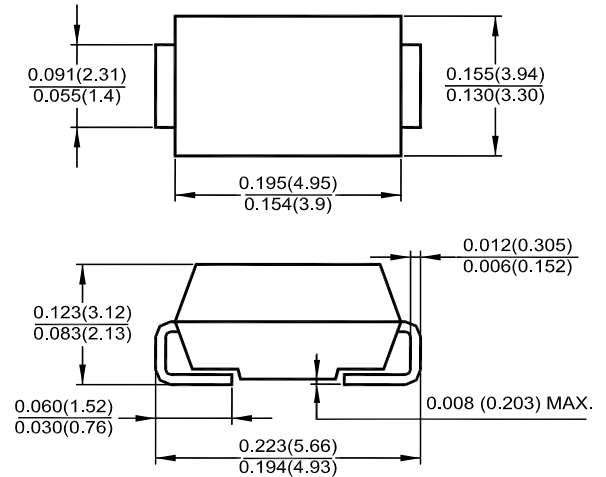
Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Fast switching for high efficiency
- Built-in strain relief, ideal for automated placement
- Low reverse leakage
- High forward surge current capability
- For surface mounted applications
- High temperature soldering guaranteed: 250 °C / 10 seconds at terminals.

Mechanical Data

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

SMB (DO-214AA)



Dimensions in inches and (millimeters)

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 current derate by 20%.

Parameter	Symbols	RS2AD	RS2BD	RS2DD	RS2GD	RS2JD	RS2KD	RS2MD	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
Maximum Average Forward Rectified Current at T _L = 90 °C	I _{F(AV)}	2							A
Peak Forward Surge Current 8.3 ms Single half Superimposed on Rated Load (JEDEC method)	I _{FSM}	50							A
Maximum Instantaneous Forward Voltage at 2 A	V _F	1.3							V
Maximum DC 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 Temperature Range	T _j	- 65 to + 150							°C
Storage Temperature Range	T _{stg}	- 65 to + 150							°C

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

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

³⁾ P.C.B mounted with 0.2×0.2 " ($5 \times 5\text{ mm}$) copper pad areas.

