

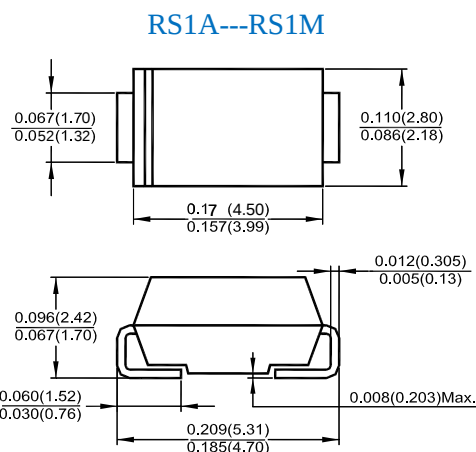
FAST RECOVERY RECTIFIERS

FEATURES

High current capability
High surge current capability
High reliability
Low reverse current
Low forward voltage drop
Fast switching for high efficiency

MECHANICAL DATA

SMA (DO-214AC) molded plastic
Polarity: Color band denotes cathode end



Dimensions in inches and (millimeters)
DO-214AC (SMA)

MAXIMUM RATINGS AND ELECTRICAL 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	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M	Unit
Maximum Recurrent 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 Current at T _A = 90 °C	I _{F(AV)}	1							A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	35							A
Maximum Forward Voltage at I _F = 1A	V _F	1.3							V
Maximum DC Reverse Current at T _A = 25 °C	I _R	5							µA
at Rated DC Blocking Voltage at T _A = 100 °C		50							
Maximum Reverse Recovery Time ¹⁾	t _{rr}	150				250	500		ns
Typical Junction Capacitance ²⁾	C _J	50							pF
Operating and Storage Temperature Range	T _J ,T _S	- 65 to + 150							°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.

RS1A---RS1M Typical Characteristics

