

FAST RECOVERY RECTIFIERS

FEATURES

High current capability

High reliability

Low reverse current

Low forward voltage drop

Fast switching for high efficiency

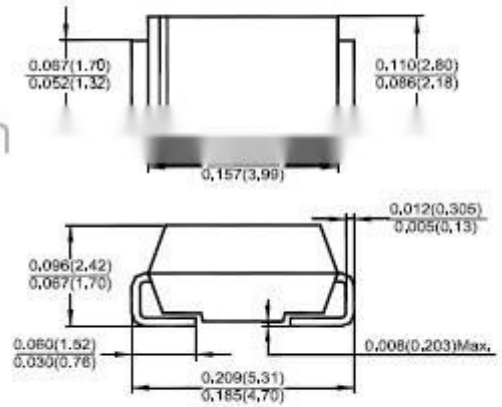
MECHANICAL DATA

SMA (DO-214AC) molded plastic

Polarity: Color band denotes cathode end

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RS1A--RS1M



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	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Current at $T_a = 90\text{ }^\circ\text{C}$	$I_F(AV)$	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 $I_F = 1\text{ A}$	$V_F$	1.3							V
Maximum Reverse Recovery Time <sup>1)</sup>	$t_{rr}$	150				250	500		ns
Typical Junction Capacitance <sup>2)</sup>	$C_J$	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.