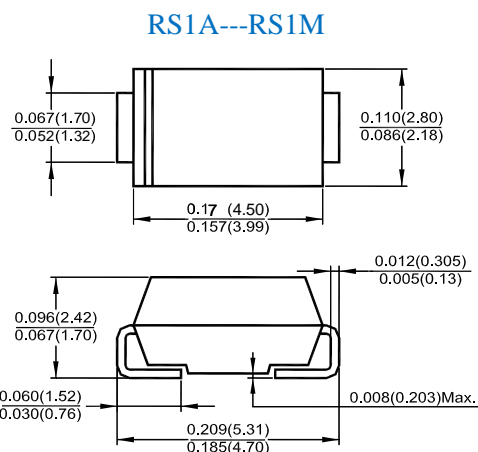


**FAST RECOVERY RECTIFIERS**
**FEATURES**

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 $T_a = 90^\circ\text{C}$	$I_{F(AV)}$	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 DC Reverse Current at $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage at $T_A = 100^\circ\text{C}$	$I_R$	5							$\mu\text{A}$
		50							
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							$^\circ\text{C}$

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.

RS1A---RS1M Typical Characteristics

