

**Major Ratings and Characteristics**

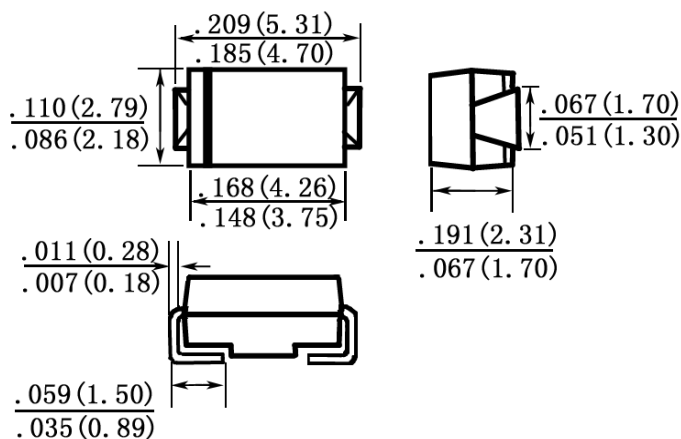
$I_{F(AV)}$	1.0 A
V_{RRM}	50 V to 1000 V
I_{FSM}	30 A
t_{rr}	150nS, 250nS, 500nS
V_F	1.3 V
$T_j \text{ max.}$	125 °C

Features

- Low profile package
- Ideal for automated placement
- Fast switching for high efficiency
- High forward surge capability
- High temperature soldering:
260°C/10 seconds at terminals
- Component in accordance to
RoHS 2002/95/1 and WEEE 2002/96/EC

Mechanical Data

- Case: JEDEC DO-214AC molded plastic
- Terminals: Solder plated, solderable per
J-STD-002B and JESD22-B102D
- Polarity: Laser band denotes cathode end

DO-214AC(SMA)**Dimensions in inches and (millimeters)****Maximum Ratings & Thermal Characteristics & Electrical Characteristics**

(TA = 25 °C unless otherwise noted)

	Symbol	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M	UNIT
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	I _{F(AV)}	1							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	30							A
Maximum instantaneous forwad voltage at 1.0A	V _F	1.3							V
Maximum DC reverse current T _A = 25 °C	I _R	5.0							μA
at Rated DC blocking voltage T _A = 125°C		50							μA
Maximum reverse recovery time at I _F = 0.5 A , I _R = 1.0 A , I _{rr} = 0.25 A	t _{rr}	150				250	500		nS
Typical junction capacitance at 4.0 V ,1MHz	C _J	11					8		pF
Thermal resistance from junction to ambient	R _{θJA}	75							°C/ W
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +125							°C



Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

