



**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

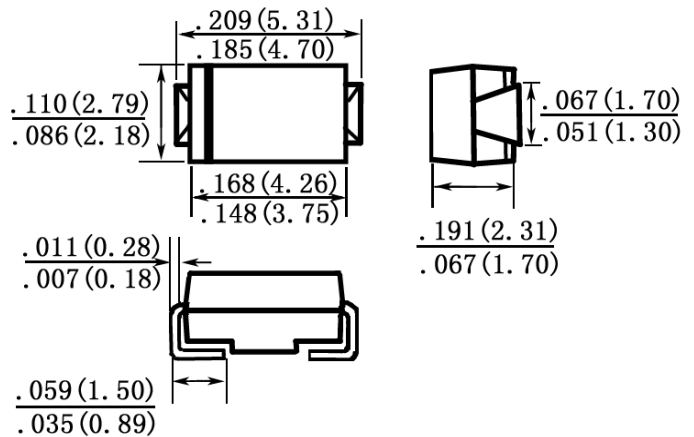
**Features**

- 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 Date**

- 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 forward voltage at 1.0A	$V_F$	1.3							V
Maximum DC reverse current $T_A = 25\text{ °C}$	$I_R$	5.0							$\mu\text{A}$
at Rated DC blocking voltage $T_A = 125\text{ °C}$		50							$\mu\text{A}$
Maximum reverse recovery time at $I_F = 0.5\text{ A}$ , $I_R = 1.0\text{ A}$ , $I_{rr} = 0.25\text{ A}$	$t_{rr}$	150				250	500		nS
Typical junction capacitance at 4.0 V, 1MHz	$C_J$	11					8		pF
Thermal resistance from junction to ambient	$R_{\theta JA}$	75							°C/W
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +125							°C





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

