

**RS1A THRU RS1M**

SURFACE MOUNTED FAST RECOVERY RECTIFIER

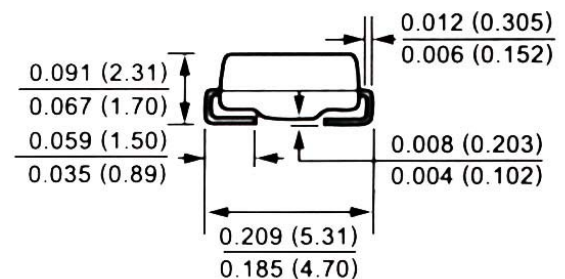
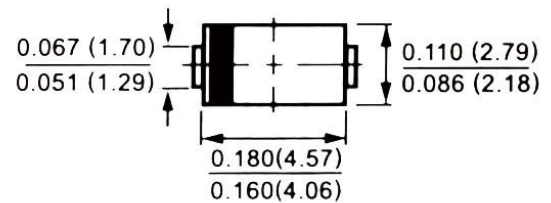
VOLTAGE: 50 TO 1000V CURRENT: 1.0A

**SMA/DO-214AC****Features**

- ◆ Glass passivated junction chip
- ◆ For surface mounted application
- ◆ Low profile package
- ◆ Built-in strain relief
- ◆ High surge capability
- ◆ High temperature soldering guaranteed
250°C/10sec/at terminal/complete device
- ◆ Fast recovery time for high efficiency

Mechanical data

- ◆ Cases: Molded with UL-94 class V-0 recognized Flame Retardant Epoxy
- ◆ Terminals: Plated axial leads solderable MIL-STD 202E, method 208C
- ◆ Polarity: Color band denote cathode end
- ◆ Weight: 0.002 ounce, 0.064 gram

**Maximum ratings and electrical characteristics**

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Dimensions in inches and (millimeters)

Parameter	Symbols	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M	Units
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	550	700	V
Maximum DC blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current 3/8" lead length at T _L =100℃	I _{F(AV)}	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	30.0							A
Maximum instantaneous forward voltage at rated forward current	V _F	1.3							V
Maximum DC reverse current Ta=25℃ At rated DC blocking voltage Ta=125℃	I _R	5.0 1000.00							μA μA
Maximum Reverse Recovery Time	T _{rr}	150				250	500		nS
Typical junction capacitance	C _J	10.0							pF
Typical thermal resistance	R _{JA}	32.0							℃/W
Storage and operating junction temperature	T _{STG}	-50 to +150							℃

Notes: 1. Measured at 1.0MHz and applied voltage of 4.0Vdc

2. Thermal resistance from junction to terminal mounted on 5×5mm copper pad area

3. Reverse recovery condition $I_F=1.0\text{A}$, $I_{rr}=0.25\text{A}$