

# RS1A THRU RS1M

## SURFACE MOUNT FAST RECOVERY RECTIFIER

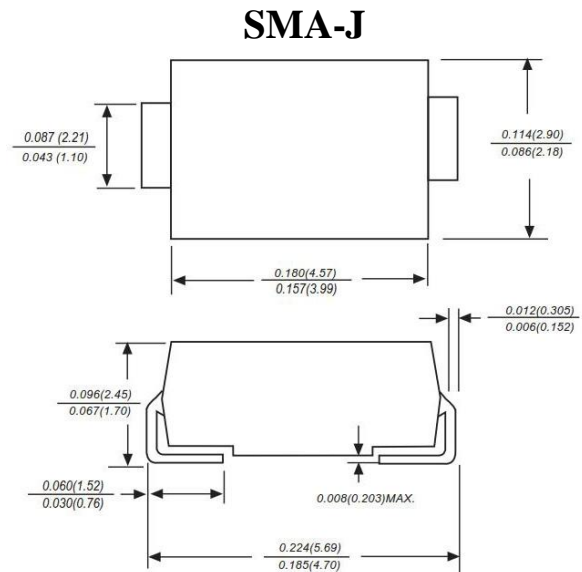
REVERSE VOLTAGE 50 to 1000 Volts    FORWARD CURRENT 1.0 Ampere

### FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0.
- ◆ For surface mounted applications.
- ◆ Fast switching for high efficiency.
- ◆ Low reverse leakage.
- ◆ Built-in strain relief, ideal for automated placement.
- ◆ High forward surge current capability.
- ◆ High temperature soldering guaranteed: 250°C/10 seconds at terminals.

### Mechanical Data

- ◆ Case: JEDEC SMA-J molded plastic body.
- ◆ Terminals: Solder plated, solderable per MIL-STD-750, Method 2026.
- ◆ Polarity: Color band denotes cathode end.
- ◆ Mounting Position: Any.



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

	SYMBOL	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	VOLTS
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	VOLTS
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current at $T_L=75^\circ\text{C}$	$I_{(AV)}$	1.0							Amp
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method)	$I_{FSM}$	30.0							Amps
Maximum Instantaneous Forward Voltage at 1.0A	$V_F$	1.3							Volts
Maximum DC Reverse Current $T_A=25^\circ\text{C}$ at Rated DC Blocking voltage $T_A=100^\circ\text{C}$	$I_R$	5.0 50.0							uA
Maximum reverse recovery time (NOTE 1)	$t_{rr}$	150				250	500		ns
Typical junction capacitance (NOTE 2)	$C_J$	15.0							pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	50.0							°C/W
Operating junction and storage temperature range	$T_J, T_{STG}$	-65 to +150							°C

Note: 1. Reverse recovery condition  $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$

2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

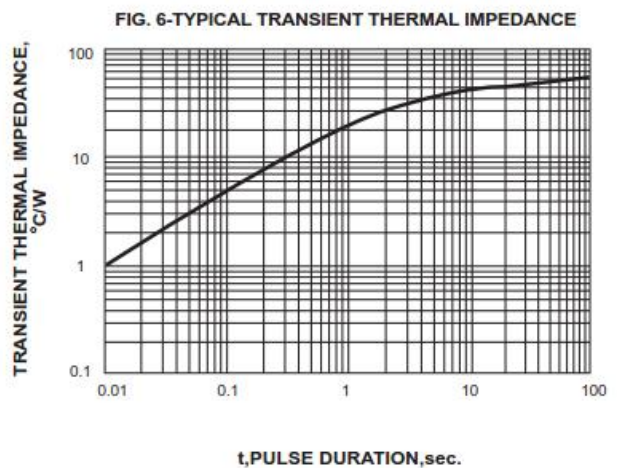
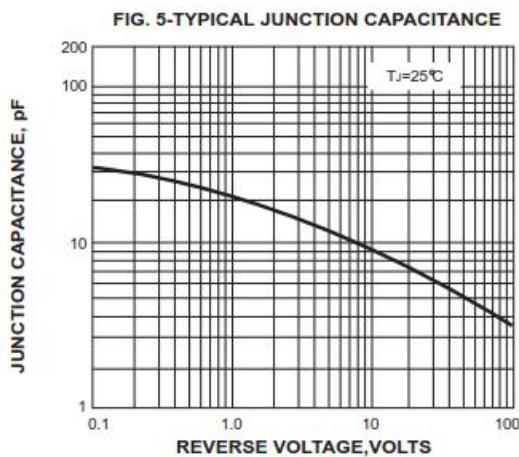
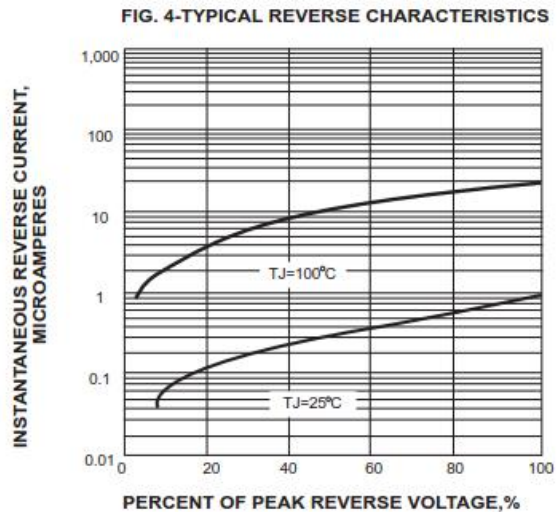
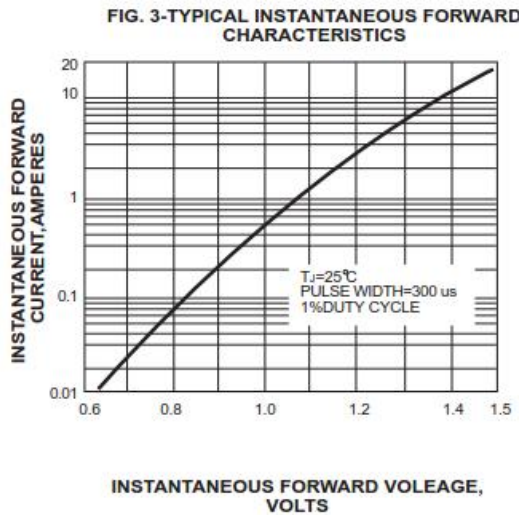
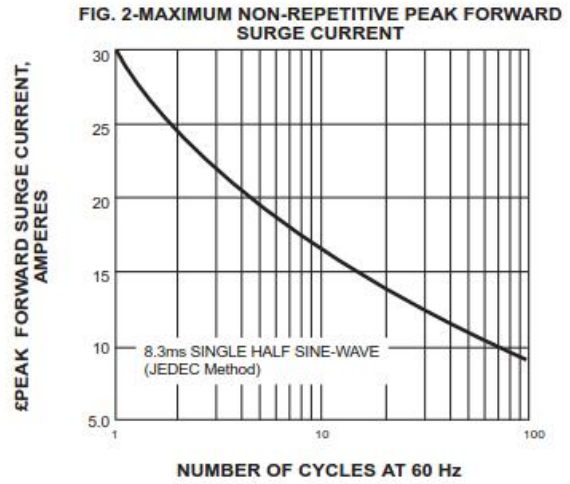
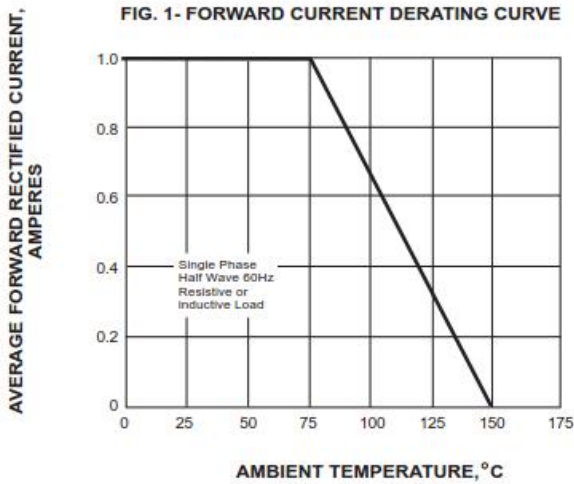
3. P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

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## RATING AND CHARACTERISTIC CURVES RS1A THRU RS1M



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.