



RS1A THRU RS1M

1.0AMP Surface Mount Glass Fast Recovery Rectifier

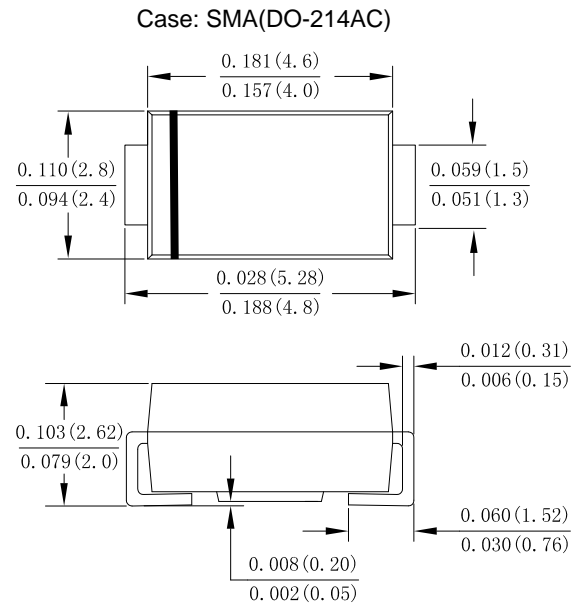
Features

- Fast switching for high efficiency
- Low Power Loss,High Efficiency
- High current capability
- For Use in Low Voltage Application
- Plastic Case Material has UL Flammability

Classification Rating 94V-0

Mechanical Data

- Case: Molded plastic SMA
- Terminals: Plated leads solderable per MIL-STD-750,Method 2026 guaranteed
- Polarity:Cathode Band or Cathode Notch
- Mounting Position: Any
- Making: Type Number



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%

Type Number	SYMBOL	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
Average Rectified Output Current @ $T_L = 100^\circ C$	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
Rating for fusing ($t < 8.3ms$)	$I^2 t$	3.74							$A^2 s$
Forward Voltage @ $I_F = 1.0A$	V_{FM}	1.3							V
Peak Reverse Current @ $T_A = 25^\circ C$	I_R	5.0							uA
At Rated DC Blocking Voltage @ $T_A = 125^\circ C$		200							
Maximum Reverse Recovery Time (Note 1)	T_{rr}	150			250	500		ns	
Typical Junction Capacitance (Note 2)	C_J	7							pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	100							$^\circ C/W$
	$R_{\theta JL}$	32							
Operating Temperature Range	T_J	-55 to +150							$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ C$

Note: 1.Reverse Recovery Test Conditions: $I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A$.

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C



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Fig. 1 Forward Current Derating Curve

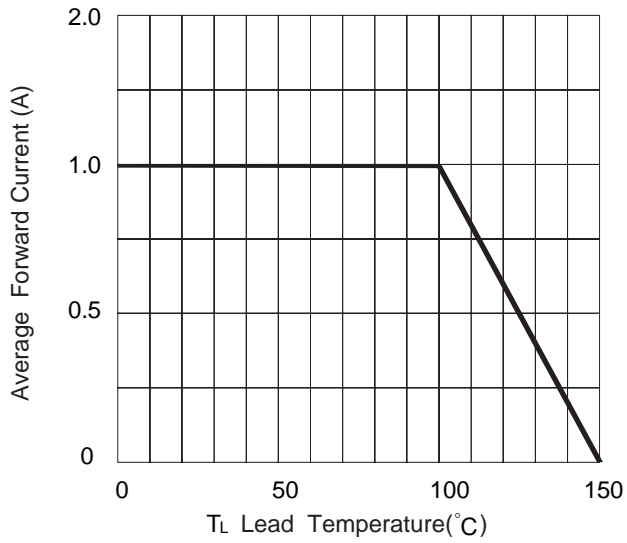


Fig. 2 Typ. Forward Characteristics

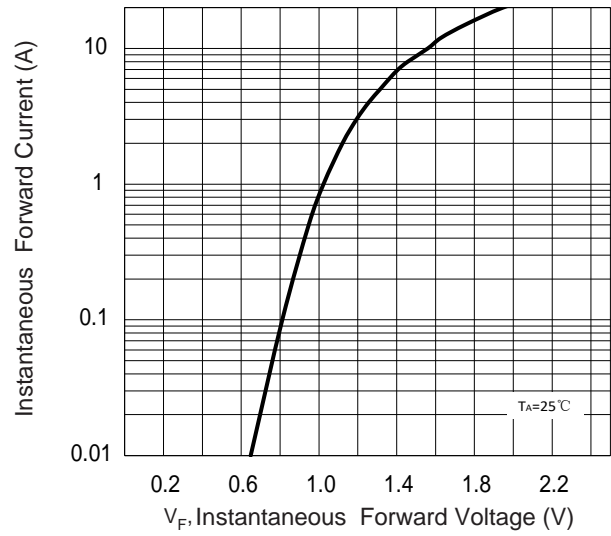


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

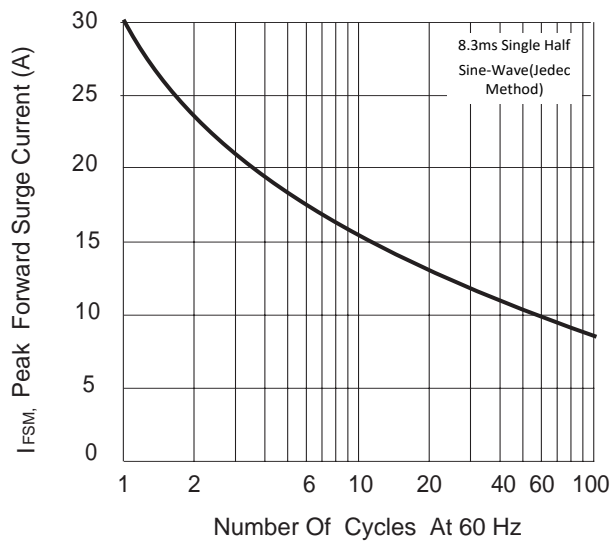


Fig. 4 Typical Junction Capacitance

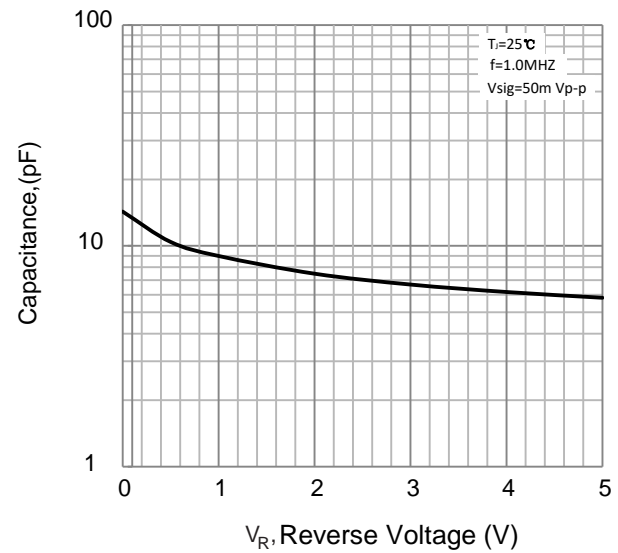


Fig. 5 Typical Reverse Characteristics

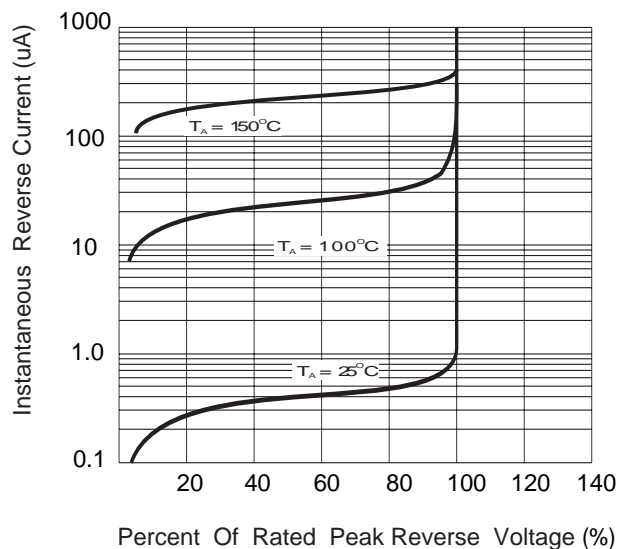
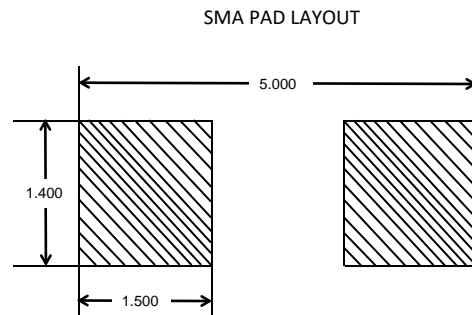


Fig. 6 Mounting PAD Layout





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