

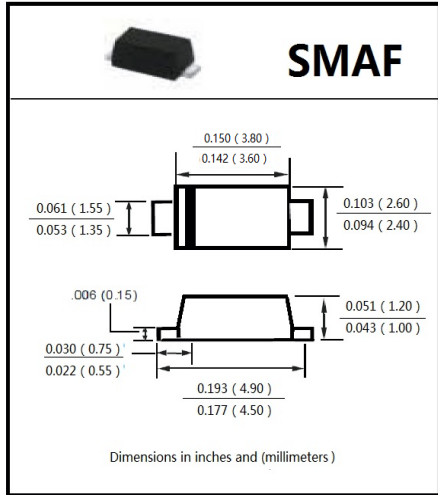


SHANGSI

RS1AF thru RS1MF

表面安装快速整流二极管
反向电压 50 --- 1000 V
正向电流 1.0A

Surface Mount Fast Recover Rectifiers
Reverse Voltage 50 to 1000 V
Forward Current 1.0 A



特征 Features

- 低的反向漏电流 Low reverse leakage
- 玻璃钝化芯片 Glass passivated chip junction
- 较强的正向浪涌承受能力 High forward surge capability
- 高温焊接保证 High temperature soldering guaranteed:
260°C/10 秒 seconds at terminals
- 引线 and 管体皆符合 RoHS 标准。
Lead and body according with RoHS standard

机械数据 Mechanical Data

- 封装: 塑料封装 Case: Molded plastic body
- 端子: 焊料被镀 Terminals: Solder plated
- 极性: 色环端为负极 Polarity: Color band denotes cathode end
- 安装位置: 任意 Mounting Position: Any

极限值和温度特性 $T_A = 25^\circ\text{C}$ 除非另有规定。

Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

	Symbols	RS1AF	RS1BF	RS1DF	RS1GF	RS1JF	RS1KF	RS1MF	Unit
最大反向峰值电压 Maximum repetitive peak reverse voltage	V_{RFR}	50	100	200	400	600	800	1000	V
最大反向有效值电压 Maximum FRS voltage	V_{FRS}	35	70	140	280	420	560	700	V
最大直流阻断电压 Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
最大正向平均整流电流 Maximum average forward rectified current	$I_{F(AV)}$	1.0							A
正向峰值浪涌电流 8.3ms 单一正弦半波 Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	30							A
最大反向峰值电流 @ $T_A = 75^\circ\text{C}$ Maximum peak reverse current full cycle	$I_{R(AV)}$	30							μA
典型热阻 Typical theFRal resistance	$R_{\theta JL}$	50							$^\circ\text{C/W}$
工作结温和存储温度 Operating junction and storage temperature range	T_J, T_{STG}	-50---+150							$^\circ\text{C}$

电特性 $T_A = 25^\circ\text{C}$ 除非另有规定。

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

	Symbols	RS1AF	RS1BF	RS1DF	RS1GF	RS1JF	RS1KF	RS1MF	Unit
最大正向电压 $I_F = 1.0\text{A}$ Maximum forward voltage	V_F	1.3							V
最大反向漏电流 $T_A = 25^\circ\text{C}$ Maximum reverse current	I_R	5.0							μA
最大反向恢复时间 $I_F = 0.5\text{A}$ $I_R = 1.0\text{A}$ $I_{RR} = 0.25\text{A}$ MAX. Reverse Recovery Time	t_{rr}	150			250		500		nS
典型结电容 $V_R = 4.0\text{V}$, $f = 1\text{MHz}$ Type junction capacitance	C_J	15							pF



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RATINGS AND CHARACTERISTICS CURVES

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

FIG. 1 FORWARD CURRENT DERATING CURVE

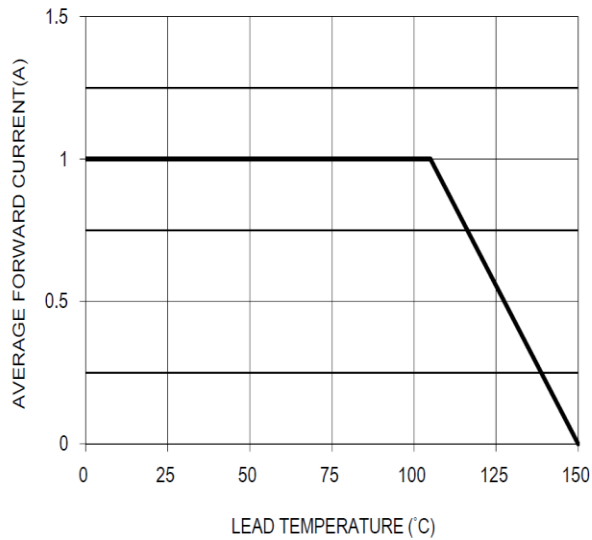


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

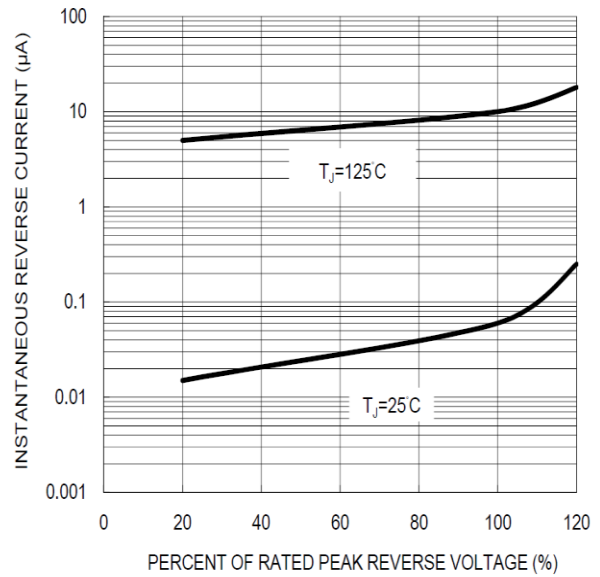


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

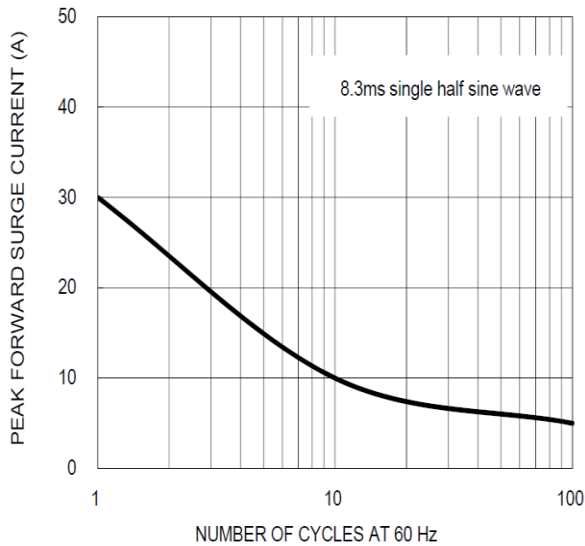
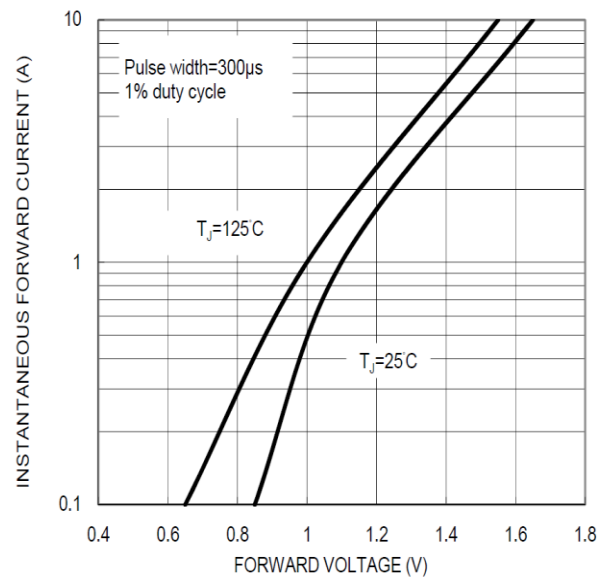
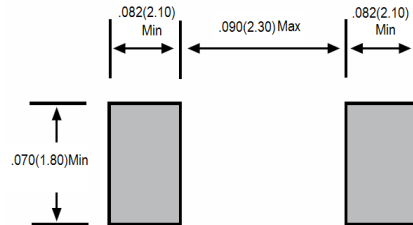


FIG. 4 TYPICAL FORWARD CHARACTERISTICS



Mounting Pad Layout



Packing

Part number	Component Package	Quantity	Packaging Option
RS1AF-RS1MF	SMAF	10000	Tape & Reel – 12mm/13" tape

Tape and Reel Specification

