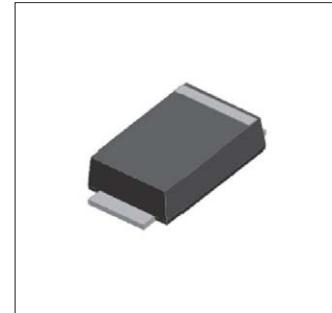


Surface Mount General Purpose Rectifier

S2AF—S2MF

Features

- ◆ Low profile package
- ◆ Ideal for automated placement
- ◆ Glass passivated chip junction
- ◆ High forward surge capability



Mechanical Data

Case: SMAF Molded plastic body

Terminals: Plated leads solderable per MIL-STD-750,
Method 2026

High temperature soldering guaranteed: 260°C/10 seconds

Polarity: Cathode line denotes the cathode end

Mounting Position: Any

Maximum Ratings & Electrical Characteristics

Ratings at TA = 25°C unless otherwise specified

Characteristic	Symbol	S2AF	S2BF	S2DF	S2GF	S2JF	S2KF	S2MF	Units
Peak repetitive reverse voltage	VRRM	50	100	200	400	600	800	1000	V
RMS reverse voltage	VRMS	35	70	140	280	420	560	700	V
DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward output current	IF(AV)	2							A
Peak forward surge current, 8.3ms single half-sine-wave, @TJ = 25°C	IFSM	50							A
Rating for fusing (t<8.3ms)	I2t	10.4							A2sec
Maximum instantaneous forward voltage @ 2A	VF	1.1							V
Maximum Reverse current Rated VR	IR	5							μA
		100							

Thermal Characteristics

Characteristic	Symbol	S2AF	S2BF	S2DF	S2GF	S2JF	S2KF	S2MF	Units
Typical thermal resistance (Note 1)	R θJA	65							°C/W
	R θJC	20							
	R θJL	25							
Operating junction temperature range	TJ	- 55 ---- + 150							°C
Storage temperature range	TSTG	- 55 ---- + 150							°C

Note

(1) Units mounted on PCB with 10 mm x 20mmx0.1mm Copper Pads

Surface Mount General Purpose Rectifier

S2AF- S2MF

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

Fig.1-Forward Current Derating Curve

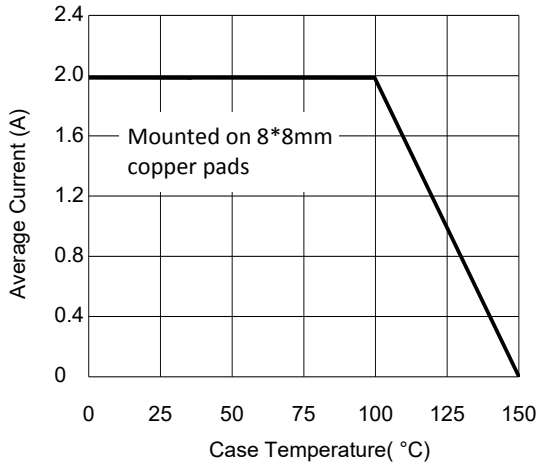


Fig.2- Surge Current Derating Curve

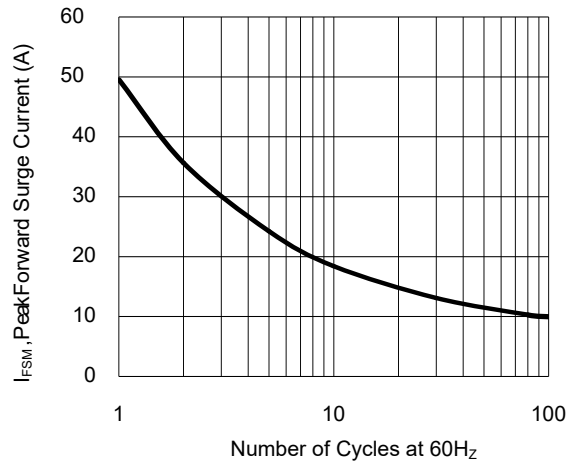


Fig.3- Typical Forward Voltage Characteristic

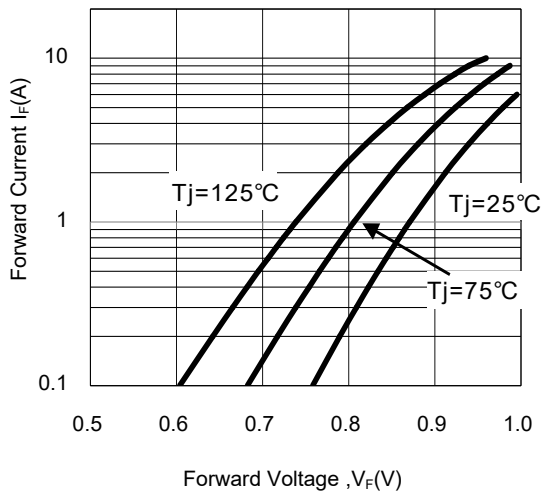
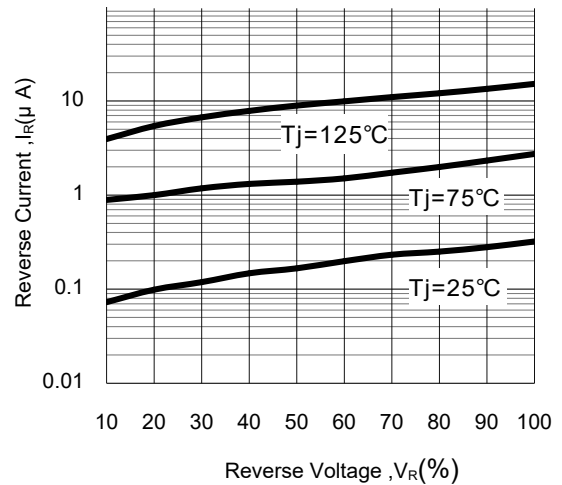


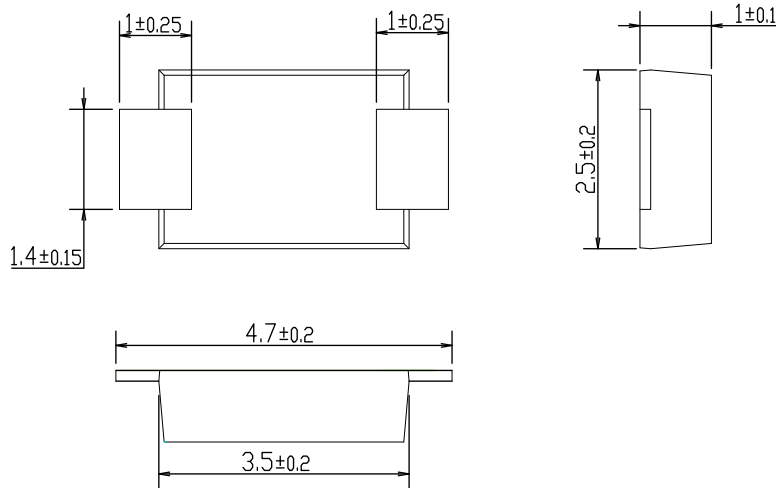
Fig.4- Typical Reverse Characteristic



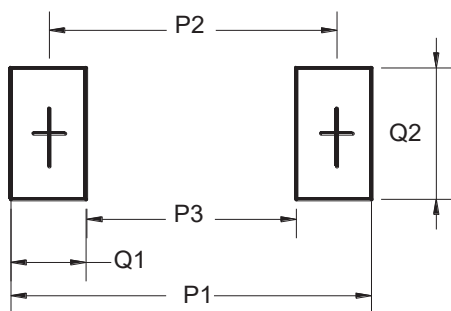
Surface Mount General Purpose Rectifier

S2AF- S2MF

Package Outline Dimensions(unit:mm)



Mounting Pad Layout(unit:mm)



Dim	Millimeters
P1	6.50
P2	4.00
P3	1.50
Q1	2.50
Q2	1.70

Ordering Information

Part No.	Marking	Package	Shipping
S2AF	S2AF	SMAF	10000PCS /Tape&Reel
S2BF	S2BF	SMAF	10000PCS /Tape&Reel
S2DF	S2DF	SMAF	10000PCS /Tape&Reel
S2GF	S2GF	SMAF	10000PCS /Tape&Reel
S2JF	S2JF	SMAF	10000PCS /Tape&Reel
S2KF	S2KF	SMAF	10000PCS /Tape&Reel
S2MF	S2MF	SMAF	10000PCS /Tape&Reel