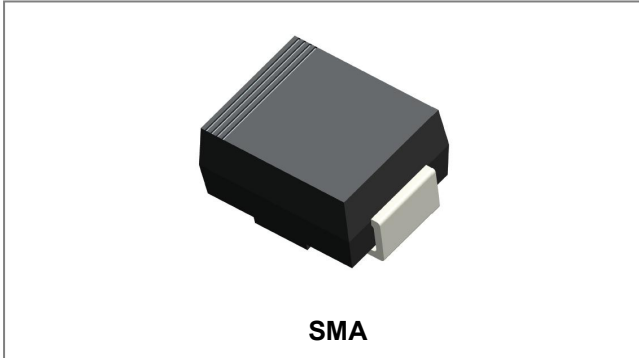


**S1A-F THRU S1M-F
1.0A SURFACE MOUNT PLASTIC SILICON RECTIFIER**



Features

- For surface mounted application
- Low forward voltage drop
- High current capability
- High reliability
- Plastic Case Material has UL Flammability Classification Rating 94V-0
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical Data

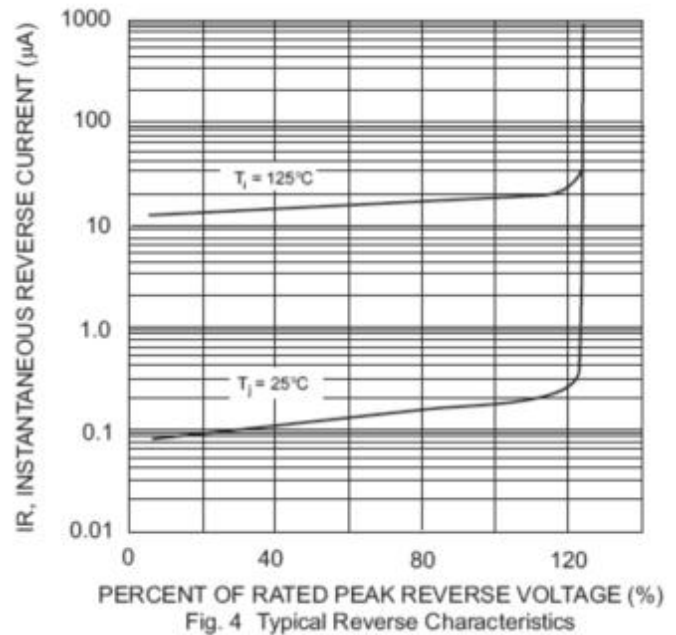
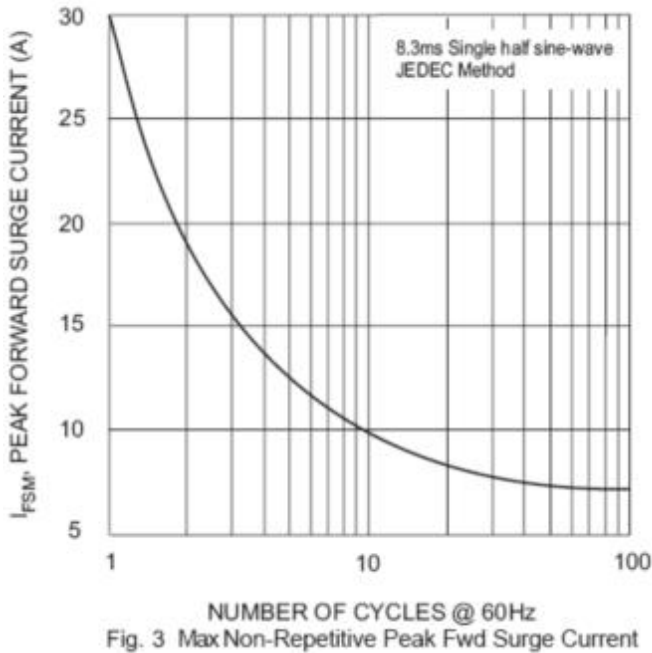
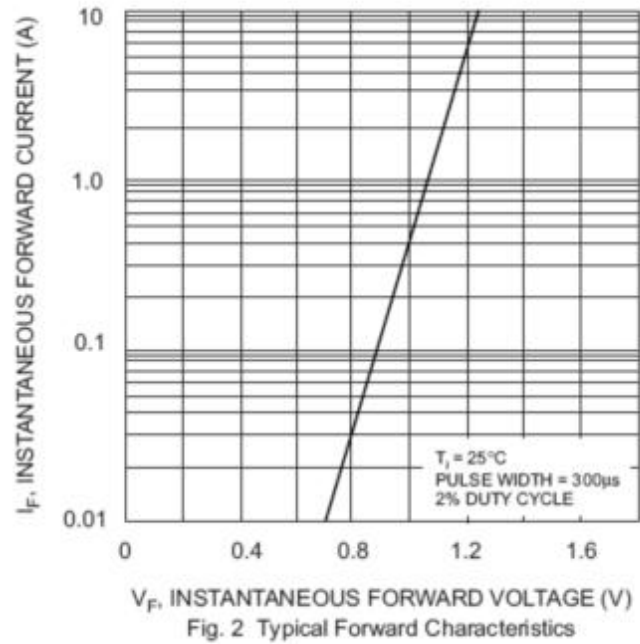
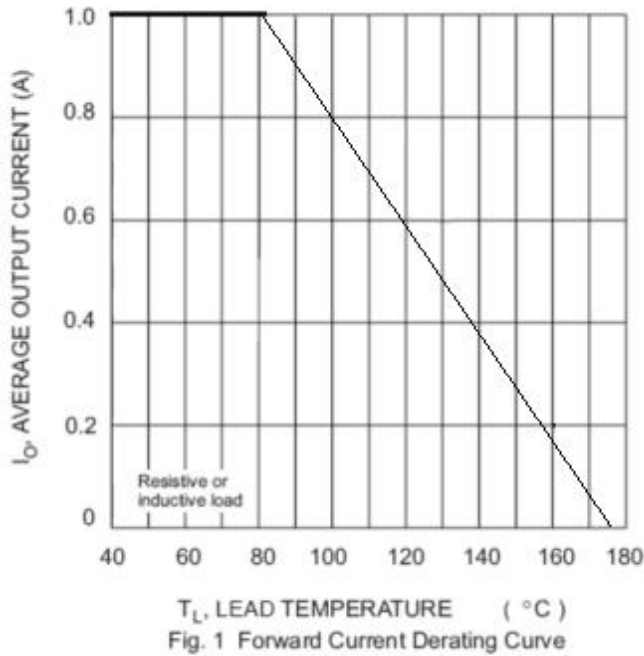
- Case: Molded Plastic SMA
- Terminals: Plated leads, solderable per MIL-STD-750, Method 2026 guaranteed
- Polarity: Color band dented cathode end
- Mounting Position: Any

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

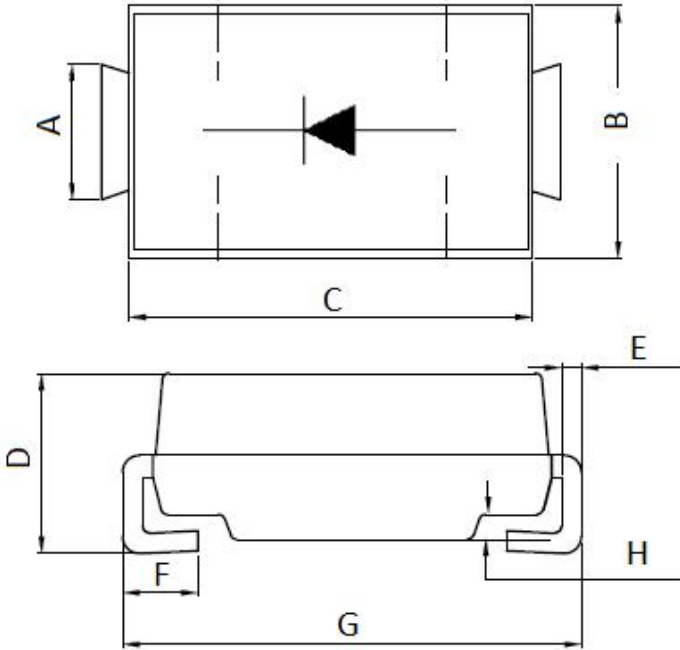
Characteristic	Symbol	S1A - F	S1B - F	S1D - F	S1G - F	S1J - F	S1K - F	S1M - F	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V _{RWM}								
DC Blocking Voltage	V _R								
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Average forward rectified output current @T _L = 80°C	I _O	1.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30							A
Forward Voltage @I _F = 1.0A	V _{FM}	1.10							V
Peak Reverse Current @T _A = 25°C	I _{RM}	5.0							μA
At Rated DC Blocking Voltage @T _A = 125°C		200							
Reverse recovery time (Note 1)	t _{rr}	2.5							μs
Typical Junction Capacitance (Note 2)	C _J	15							pF
Typical Thermal Resistance Junction to Ambient(Note 3)	R _{θJA}	30							°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +175							°C

Note: 1. Reverse recovery condition IF=0.5A, IR=1.0A, Irr=0.25A
 2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 3. Resistance from Junction to Ambient at 0.375(9.5mm) lead length.

Ratings and Characteristics Curves



Mechanical Dimensions SMA



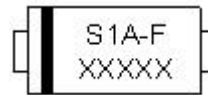
SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.20	1.70	0.047	0.067
B	2.40	2.70	0.094	0.105
C	3.90	4.30	0.152	0.167
D	2.00	2.50	0.079	0.098
E	0.150	0.305	0.006	0.012
F	0.76	1.52	0.030	0.060
G	4.80	5.28	0.188	0.208
H	0.051	0.203	0.002	0.008

Ordering Information

Device	Package	Shipping
S1(A-M)-F	SMA (Pb-Free)	5000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Marking Diagram

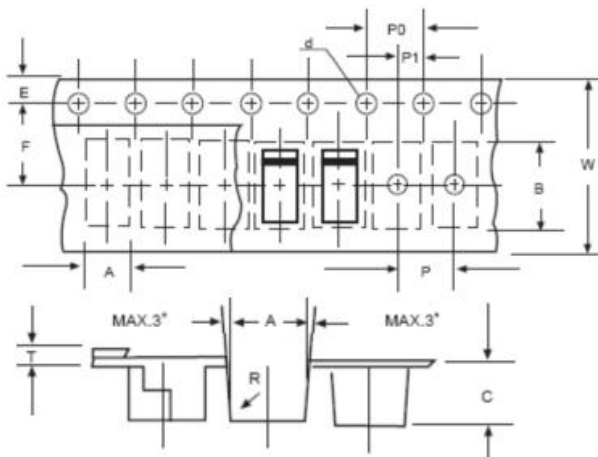


Where XXXXX is YYWWL

- S = Device Type
- 1 = Forward Current (1A)
- A = Reverse Voltage (50V)
- F = -F
- YY = Year
- WW = Week
- L = Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Carrier Tape & Reel Specification SMA



SYMBOL	Millimeters	
	Min.	Max.
A	2.97	3.17
B	5.70	5.90
C	2.32	2.52
d	1.40	1.60
E	1.40	1.60
F	5.60	5.70
P	3.90	4.10
P0	3.90	4.10
P1	1.90	2.10
T	0.25	0.35
W	11.80	12.20

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