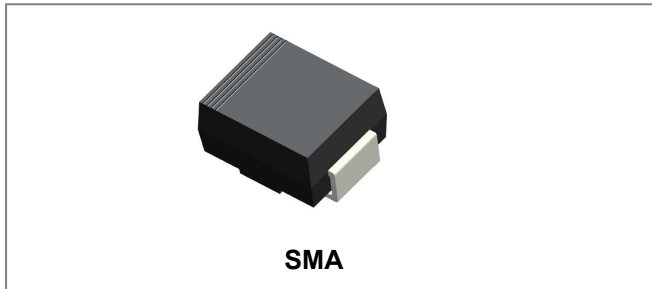


S1Y General Purpose Rectifier



Features

- Glass passivated die construction
- High surge current capability
- Cases: Molded plastic
- MSL is level One
- Terminals finish: Tin Lead-free plated
- This is a Pb – Free device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Applications

- Rectifier

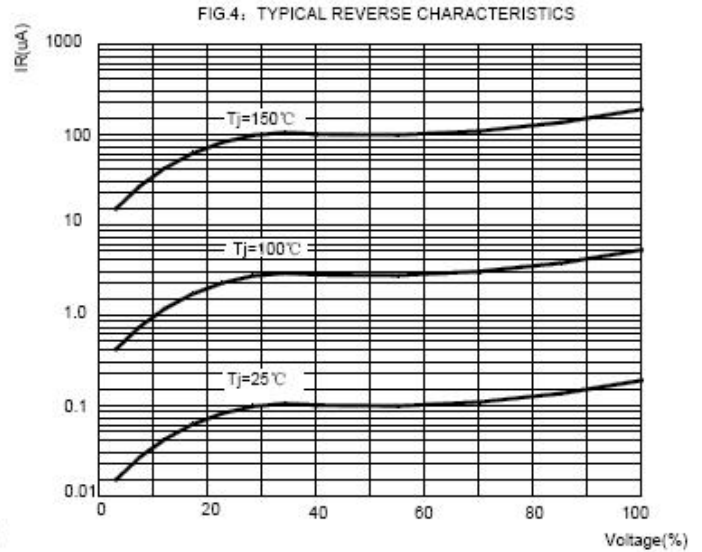
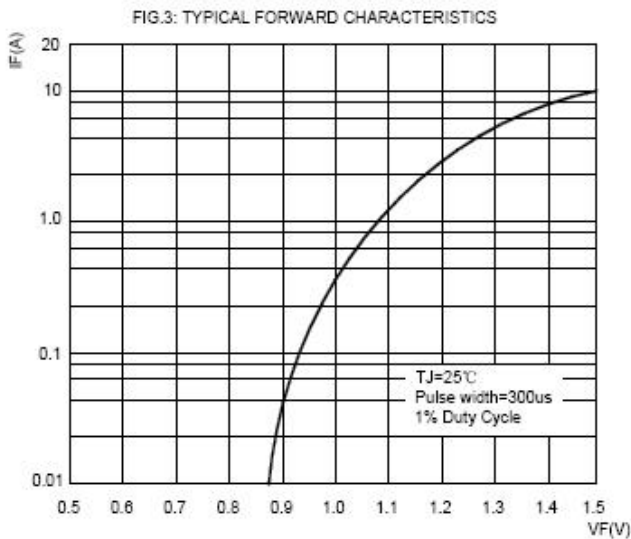
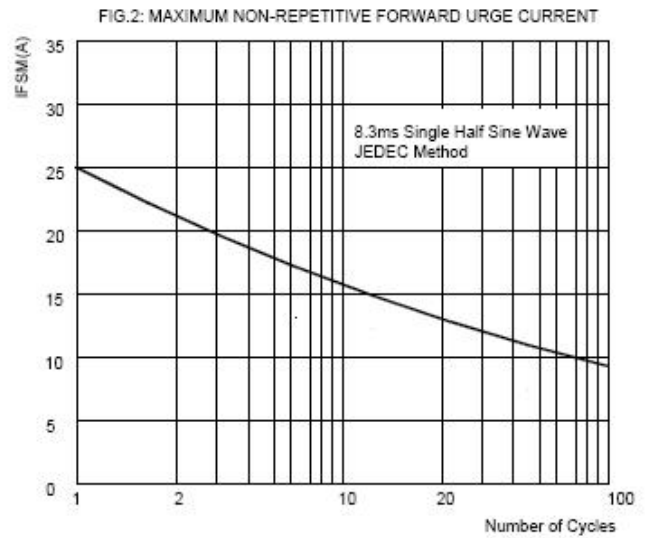
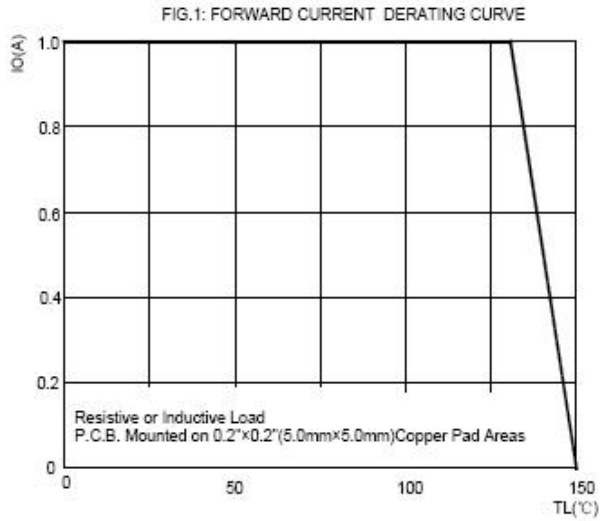
Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	S1Y	Units
Peak Repetitive Reverse Voltage	V _{RRM}	2000	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
Maximum RMS voltage	V _{RMS}	1400	V
Average Rectified Output Current 60HZ Half-sine wave, Resistance load, T _L = 130°C	I _O	1	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	25	A
Forward Voltage* @ I _F = 1.0 A	V _F	1.2	V
Peak Reverse Current* @T _A = 25°C At Rated DC Blocking Voltage @T _A = 125°C	I _{RM}	5 200	μA
Typical Junction Capacitance(Note1)	C _J	14	pF
Typical Thermal Resistance Junction to Lead (Note 2)	R _{θJL}	22	°C/W
Typical Thermal Resistance Junction to Ambient (Note 2)	R _{θJA}	95	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150	°C

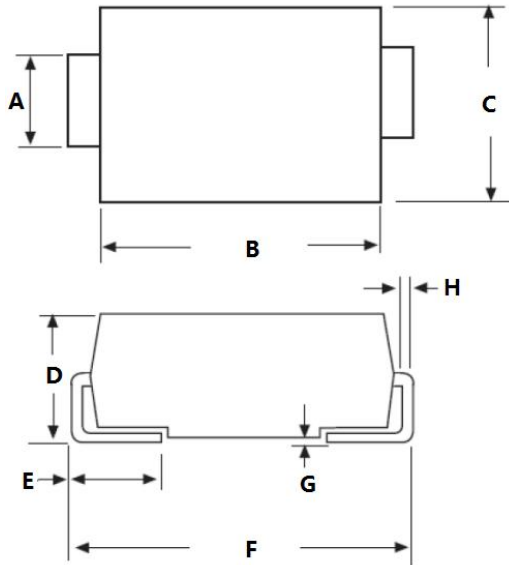
* Pulse width < 300 μs, duty cycle < 2%

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas.

Ratings and Characteristics Curves



Mechanical Dimensions SMA



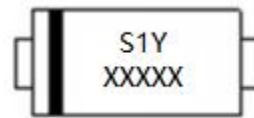
SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.25	1.65	0.049	0.065
B	3.95	4.60	0.156	0.181
C	2.25	2.95	0.089	0.116
D	1.95	2.90	0.077	0.114
E	0.75	1.60	0.030	0.063
F	4.80	5.60	0.189	0.220
G	0.05	0.20	0.002	0.008
H	0.15	0.41	0.006	0.016

Ordering Information

Device	Package	Shipping
S1Y	SMA(Pb-Free)	5000pcs / reel
S1YTR	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.

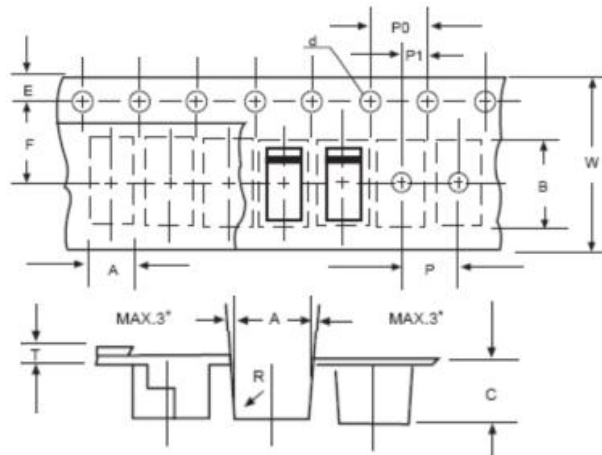
Marking Diagram



Where XXXXX is YYWWL

- S = Device Type
- 1 = Forward Current (1A)
- Y = Reverse Voltage (2000V)
- YY = Year
- WW = Week
- L = Lot Number

Carrier Tape 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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