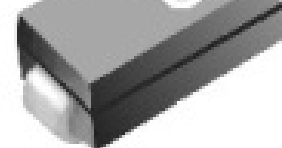


- ◇ High current capability
- ◇ Easy pick and place
- ◇ High surge current capability
- ◇ Plastic material used carries Underwriters Laboratory Classification 94V-0
- ◇ High temperature soldering:  
260°C/10 seconds at terminals
- ◇ Green compound with suffix "G" on packing code & prefix "G" on datecode



## Mechanical Data

- ◇ Case: Molded plastic
- ◇ Terminal: Pure tin plated, lead free
- ◇ Polarity: Indicated by cathode band
- ◇ Packaging: 12mm tape per EIA STD RS-481
- ◇ Weight: 0.064 grams

## Ordering Information (example)

Part No.	Package	Packing	Packing code	Green Compound Packing code
S2AA	SMA	1.8K / 7" REEL	R3	R3G

## Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	S2 AA	S2 BA	S2 DA	S2 GA	S2 JA	S2 KA
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1.5					
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	50					
Maximum Instantaneous Forward Voltage (Note 1) @ 1.5A	$V_F$	1.1					
Maximum DC Reverse Current at @ $T_A=25\text{ }^\circ\text{C}$ Rated DC Blocking Voltage @ $T_A=125\text{ }^\circ\text{C}$	$I_R$	5 125					
Maximum Reverse Recovery Time (Note 2)	$T_{rr}$	1.5					
Typical Junction Capacitance (Note 3)	$C_j$	30					
Typical Thermal Resistance	$R_{\theta JL}$	16					
	$R_{\theta JA}$	53					
Operating Temperature Range	$T_J$	- 55 to + 150					
Storage Temperature Range	$T_{STG}$	- 55 to + 150					

Note 1: Pulse Test with PW=300 usec, 1% Duty Cycle

Note 2: Reverse Recovery Test Conditions:  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$

Note 3: Measured at 1 MHz and Applied  $V_R=4.0$  Volts

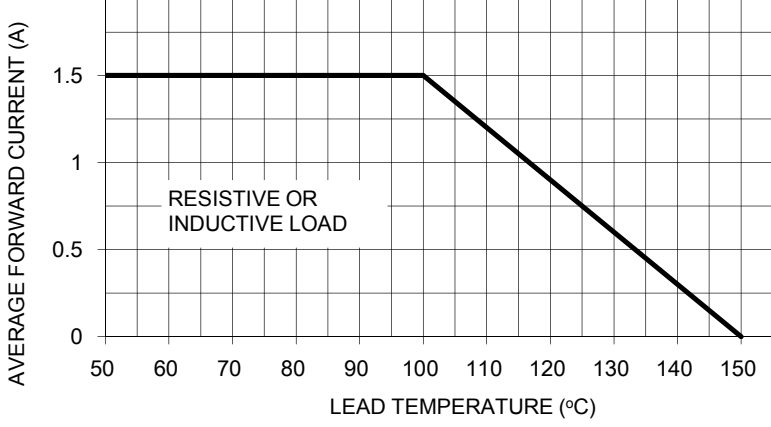


FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

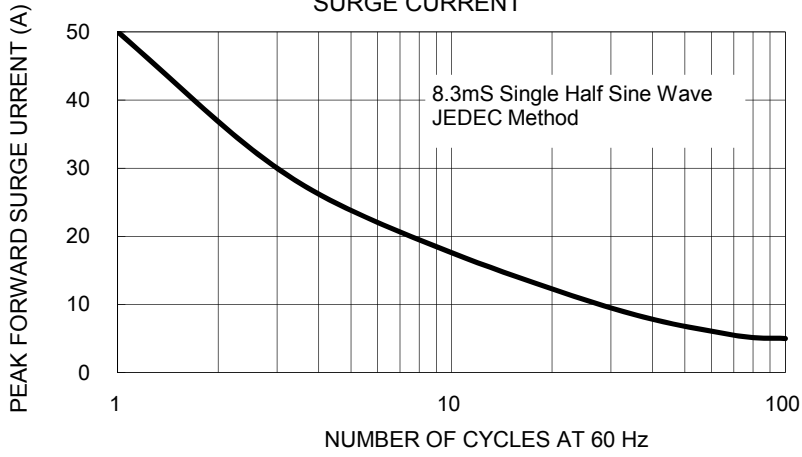


FIG. 4- TYPICAL JUNCTION CAPACITANCE

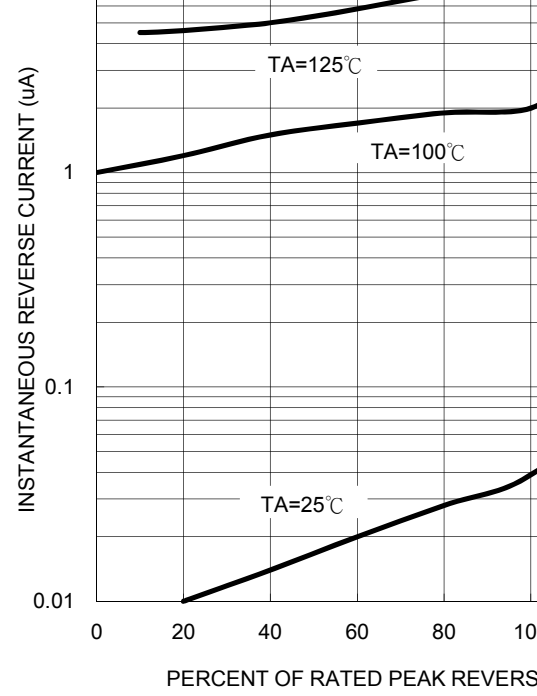
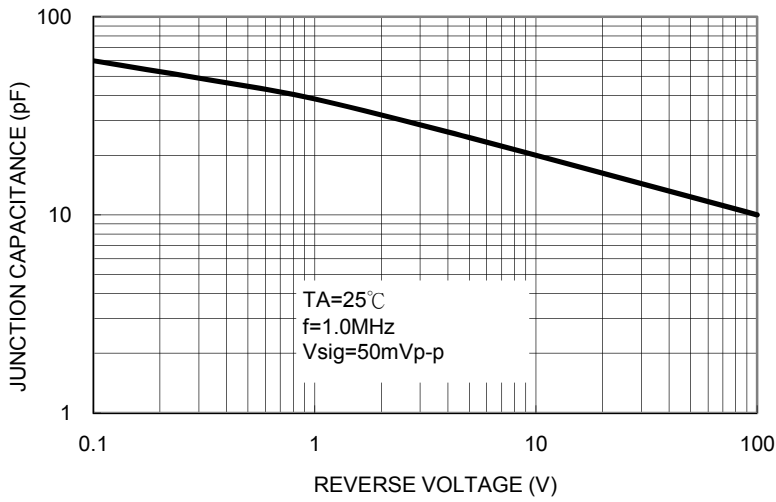


FIG. 5- TYPICAL FORWARD CHARACTERISTICS

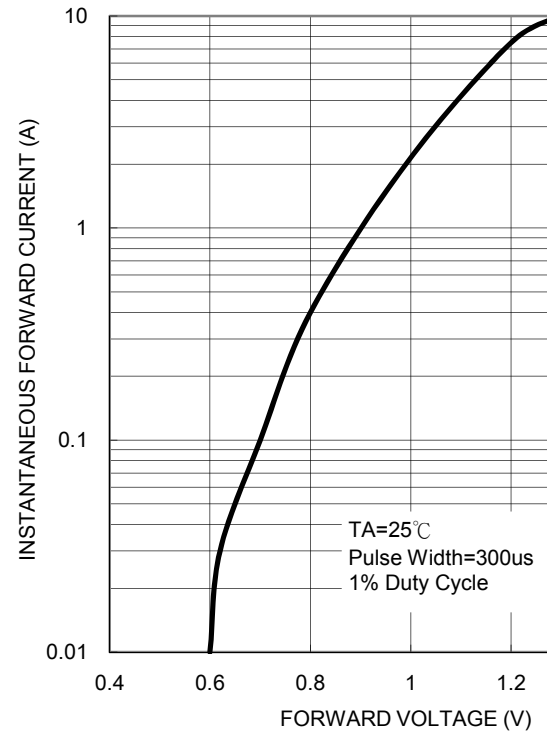
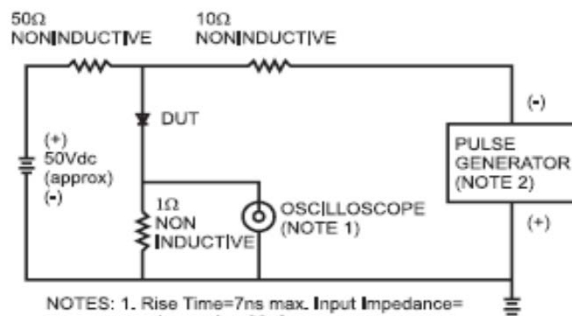
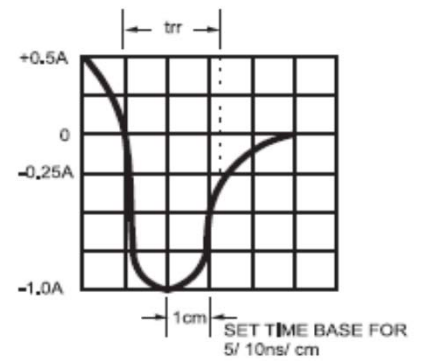


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



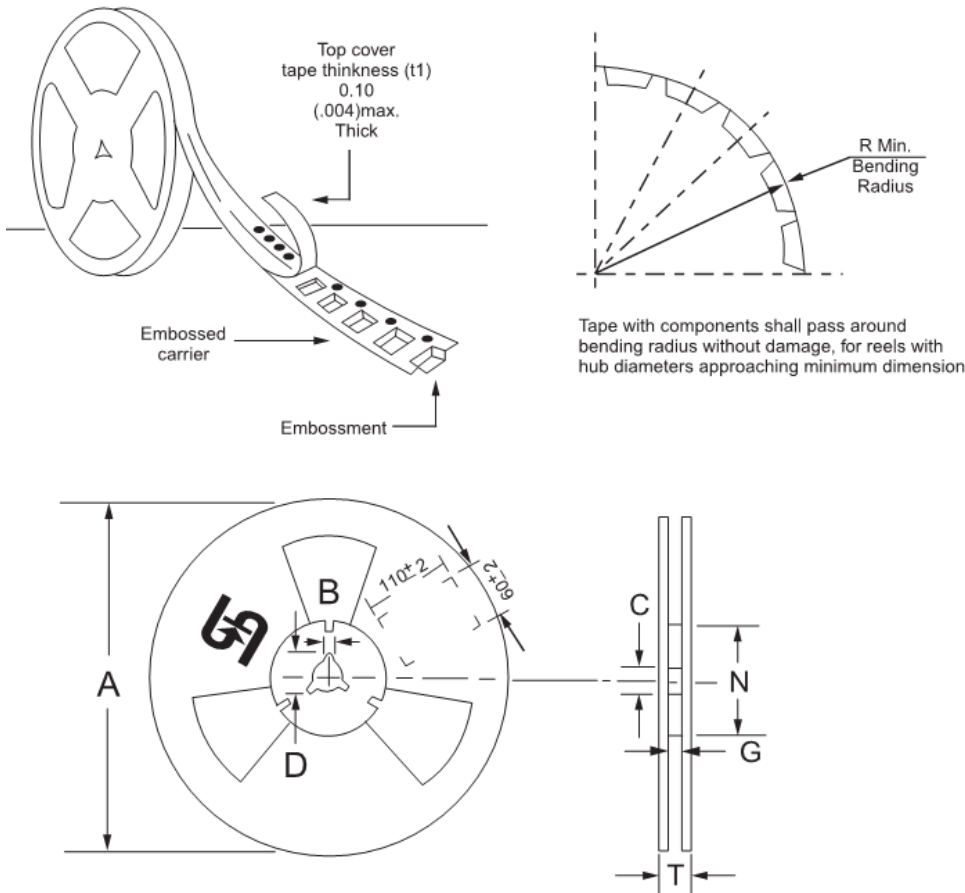
NOTES: 1. Rise Time=7ns max. Input Impedance= 1 megohm 22pf  
2. Rise Time=10ns max. Source Impedance= 50 ohms



S2XA (Note)	Folded SMA	1.8K / 7" REEL	F3	F3G
	Folded SMA	7.5K / 13" REEL	F2	F2G
	C SMA	1.8K / 7" REEL	E3	E3G
	C SMA	7.5K / 13" REEL	E2	E2G

Note: "x" is Device Code from "A" thru "M".

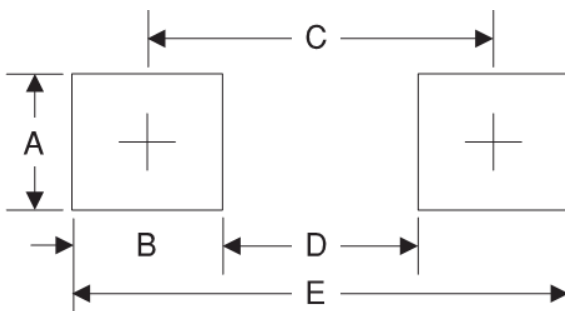
### Tape & Reel specification



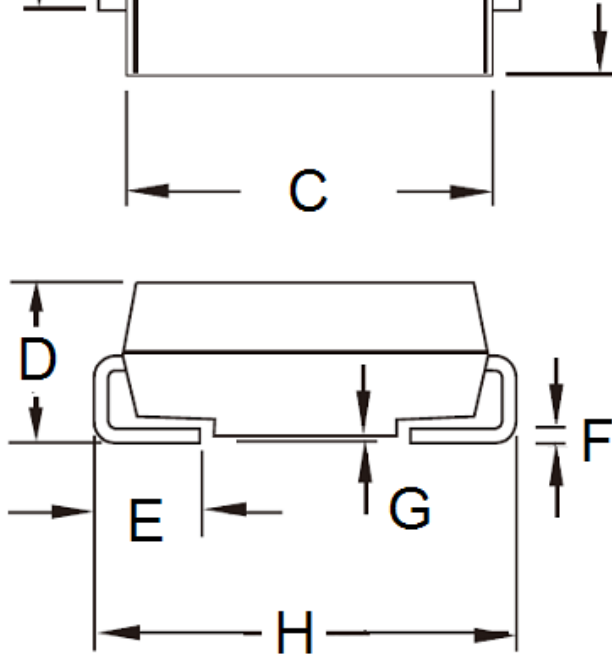
Reel Size	Tape Size	A	B	C	D	N	G	T
		$\pm 2.0$	$\pm 0.4$	$+0.5; -0.2$	min	$\pm 1.0$	$+0.8; -0$	max
7"	12mm	178	1.9	13	21	62	12.2	14.6
Reel Size	Tape Size	A	B	C	D	N	G	T
		max	$\pm 0.5$	$\pm 0.5$	min	$\pm 0.5$	$+2.0; -0$	max
13"	12mm	330	2	13	20.2	75	12.4	18.4

Unit (mm)

### Suggested PAD Layout

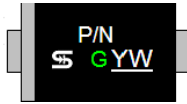


Symbol	Unit(mm)
A	1.78
B	1.51
C	3.92
D	2.41
E	4.43



C	4.06	4.60	0.160	0.18
D	1.99	2.50	0.078	0.09
E	0.90	1.41	0.035	0.05
F	0.15	0.31	0.006	0.01
G	0.10	0.20	0.004	0.00
H	4.95	5.33	0.195	0.21

### Marking Diagram



- P/N = Specific Device Code
- G = Green Compound
- YW = Date Code