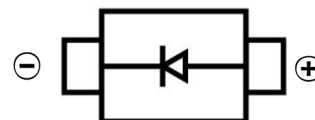


SCHOTTKY BARRIER DIODE
FEATURES

- Low Forward Voltage
- High frequency inverters
- Small Surface Mount device
- PN Junction Guard Ring for Transient and ESD Protection
- Low Capacitance


SOD-123
MECHANICAL DATA

- Case: SOD-123
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Weight: 0.005 grams (approximate)


MAXIMUM RATINGS (T_A = 25°C unless otherwise noted)

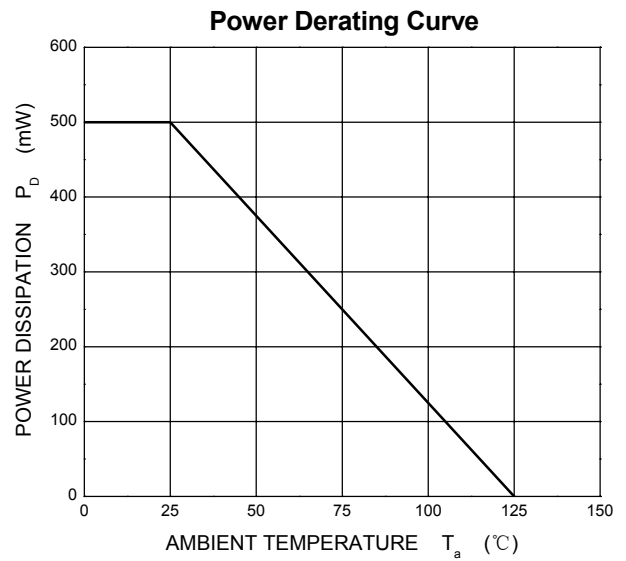
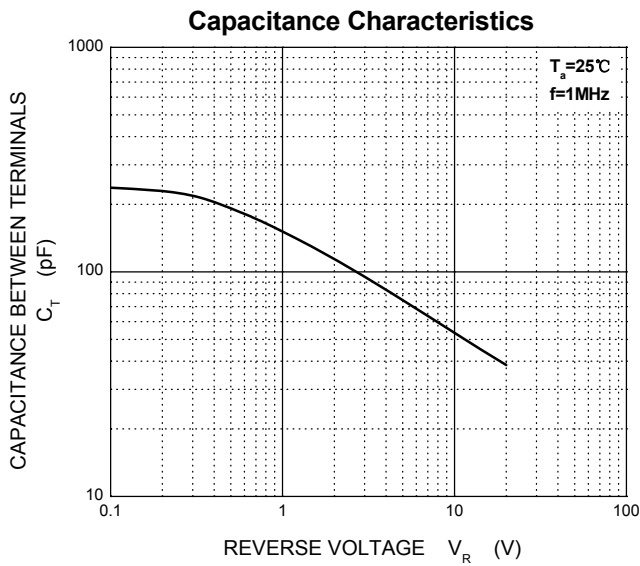
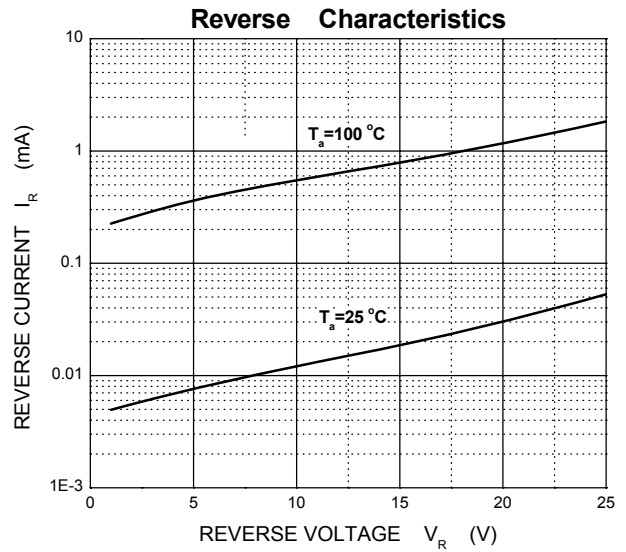
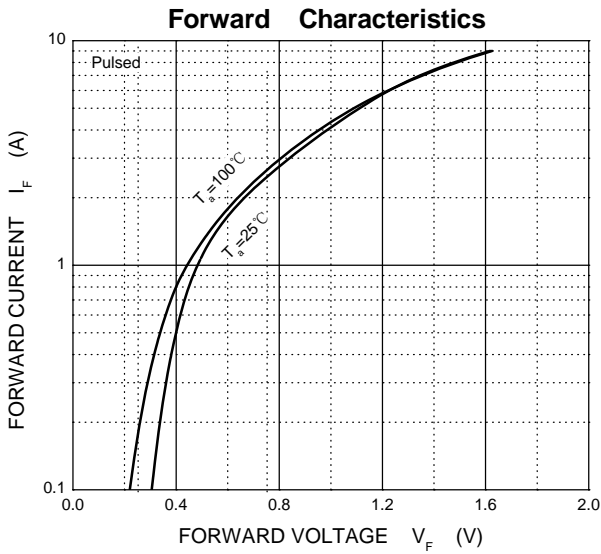
Parameter	Symbol	1N5817W	1N5818W	1N5819W	Unit
Peak Reverse Voltage	V _R	20	30	40	V
RMS Reverse Voltage	V _{R(RMS)}	14	21	28	V
Forward Current	I _F	1			A
Non-Repetitive Peak Forward Surge Current@ t = 8.3 ms	I _{FSM}	9			A
Power Dissipation	P _D	500			mW
Thermal Resistance From Junction To Ambient	R _{θJA}	200			°C/W
Junction Temperature	T _J	125			°C
Storage Temperature	T _{STG}	-55 ~+150			°C

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

Parameter	Symbol	Test conditions	1N5817W	1N5818W	1N5819W	Unit
Maximum forward voltage	V _F	I _F = 1.0A I _F = 3.0A	0.450 0.750	0.550 0.875	0.600 0.900	V
Maximum reverse breakdown voltage	V _R	I _R = 1mA	20	30	40	V
Maximum reverse current	I _R	V _R = 20V 1N5817W V _R = 30V 1N5818W V _R = 40V 1N5819W	1.0			mA
Type junction capacitance	C _D	V _R = 4.0V, f = 1MHz	120			pF

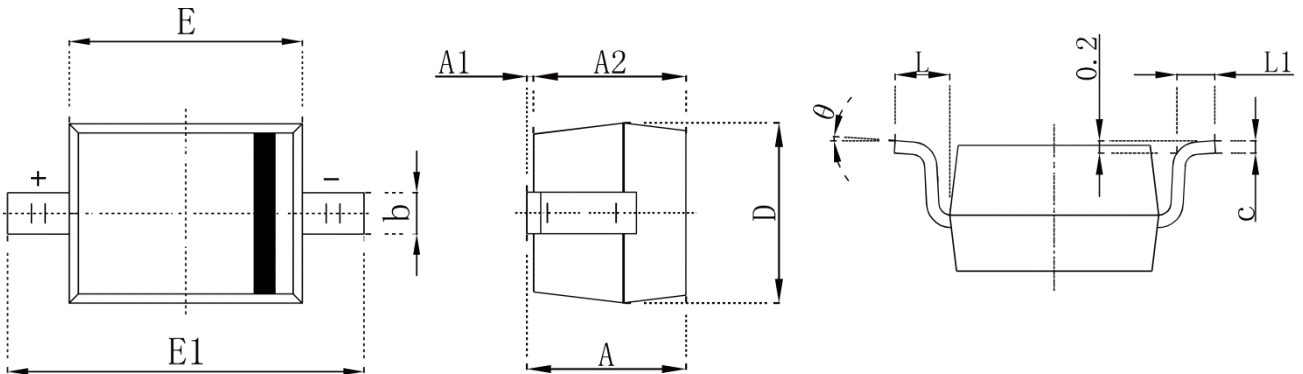
SCHOTTKY BARRIER DIODE

Typical Characteristics



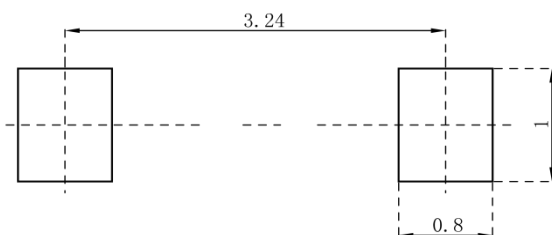
SCHOTTKY BARRIER DIODE

SOD-123 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°

SOD-123 Suggested Pad Layout



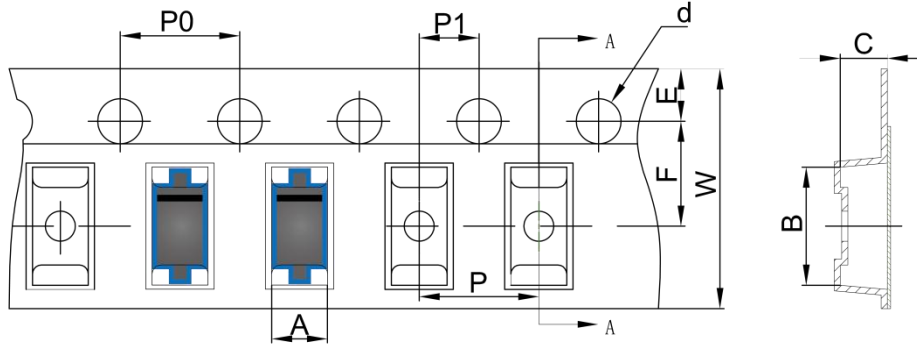
Note:

1. Controlling dimension: in millimeters
2. General tolerance: $\pm 0.05\text{mm}$
3. The pad layout is for reference purposes only

SCHOTTKY BARRIER DIODE

SOD-123 Tape and Reel

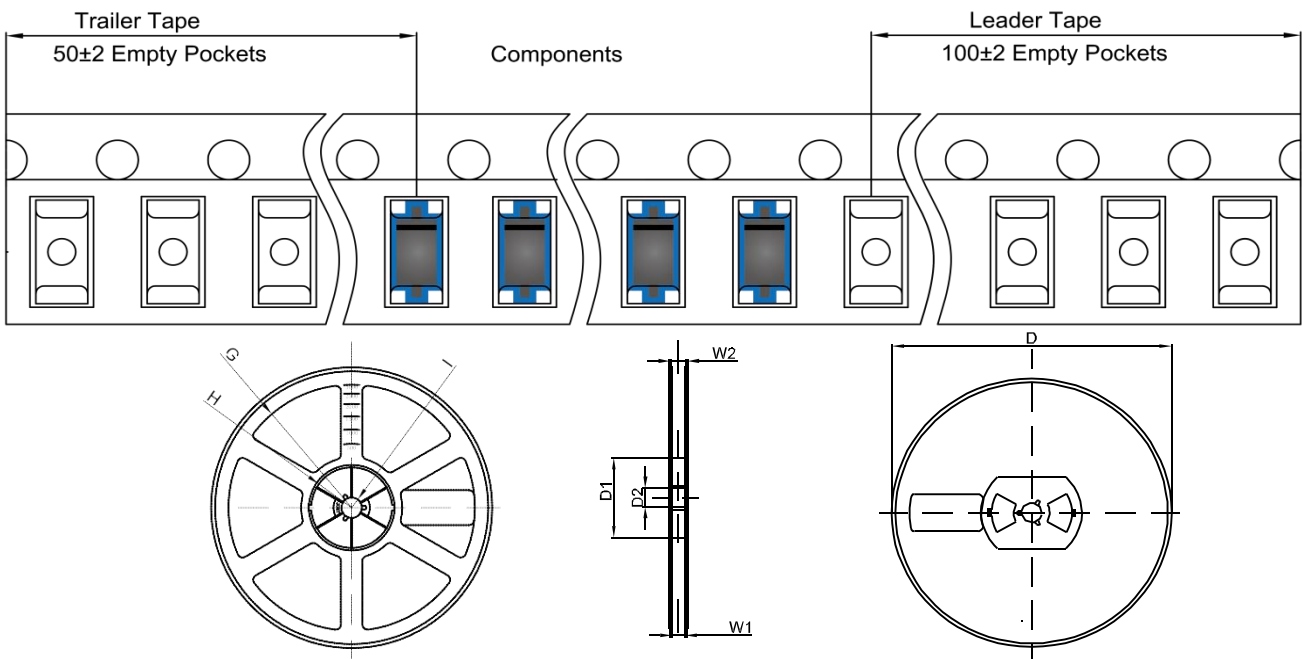
SOD-123 Embossed Carrier Tape



SOD-123 Tape Leader and Trailer

DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
SOD-123	1.85	3.95	1.57	Ø1.55	1.75	3.50	4.00	4.00	2.00	8.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

SOD-123 Reel



DIMENSIONS ARE IN MILLIMETER								
REEL OPTION	D	D1	D2	G	H	I	W1	W2
7" DIA	Ø178	54.40	13.00	R78	R25.60	R6.50	9.50	12.30
TOLERANCE	±2	±1	±1	±1	±1	±1	±1	±1