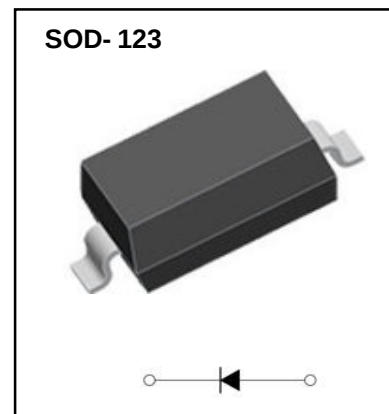


SOD-123 Plastic-Encapsulate Diodes

SCHOTTKY BARRIER DIODE

Features

- Small surface mounting type
- Low forward voltage
- High reliability



Maximum Ratings @Ta=25°C

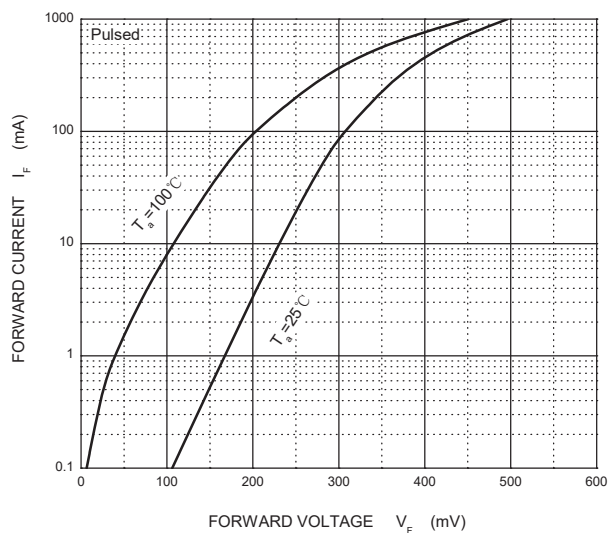
Parameter	Symbol	Limit	Unit
DC reverse voltage	V_R	60	V
Mean rectifying current	I_O	1	A
Peak forward surge current @t=8.3ms	I_{FSM}	15	A
Power dissipation	P_D	350	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	286	°C/W
Operating Junction Temperature Range	T_j	-40 ~ +125	°C
Storage Temperature Range	T_{stg}	-55 ~ +150	°C

Electrical characteristics @Ta=25°C

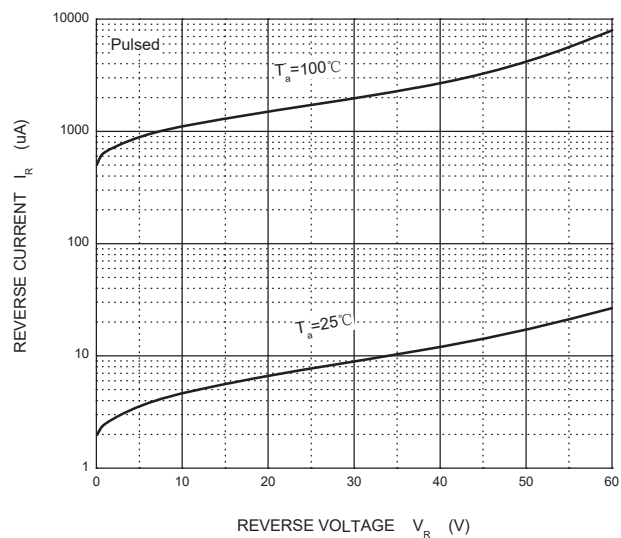
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F			0.58	V	$I_F=1A$
Reverse current	I_R			30	μA	$V_R=60V$

Typical Characteristics

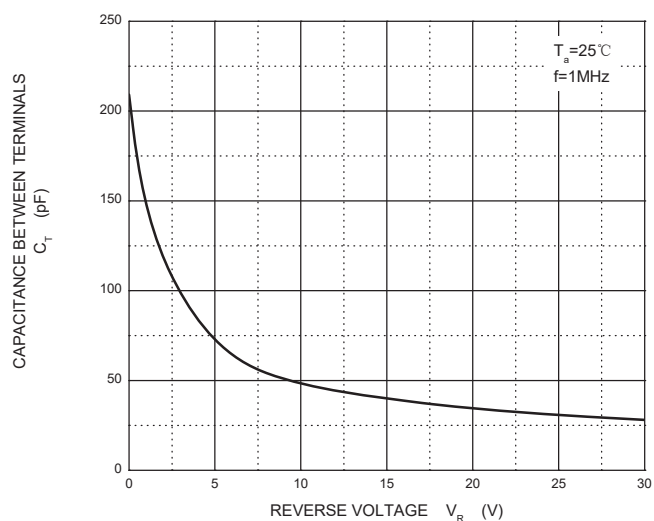
Forward Characteristics



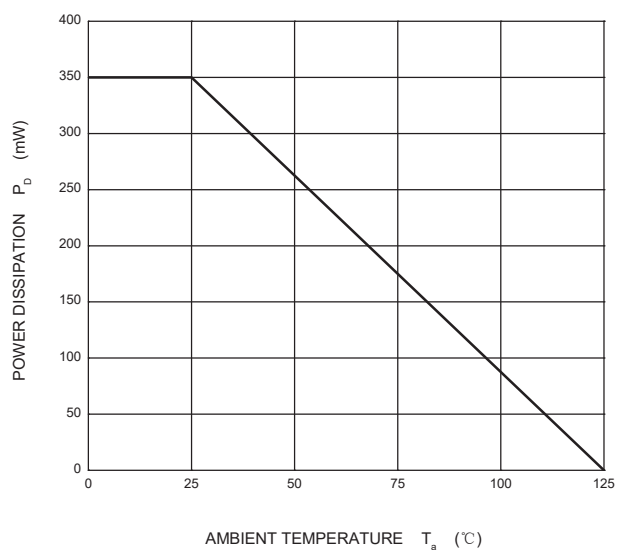
Reverse Characteristics



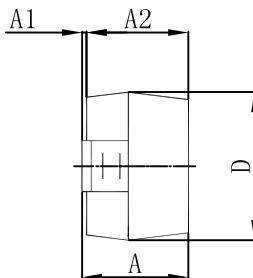
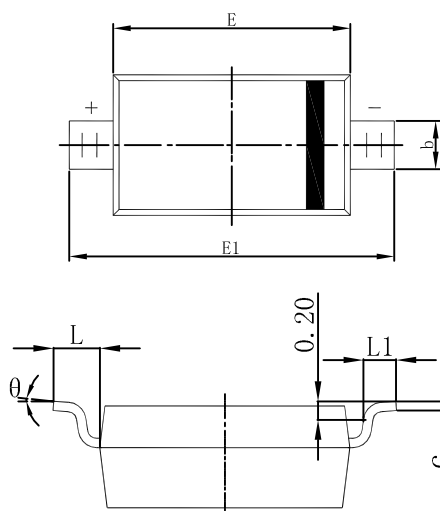
Capacitance Characteristics



Power Derating Curve

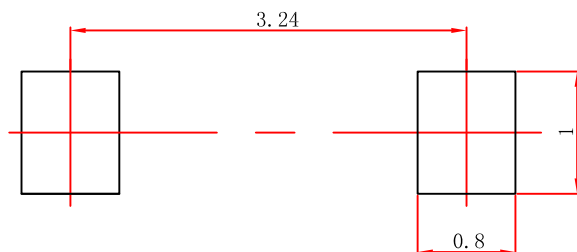


SOD-123 Package Outline Dimensions



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	1.800	0.059	0.070
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°

SOD-123 Suggested Pad Layout



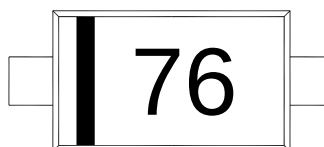
Note:

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

Ordering Information

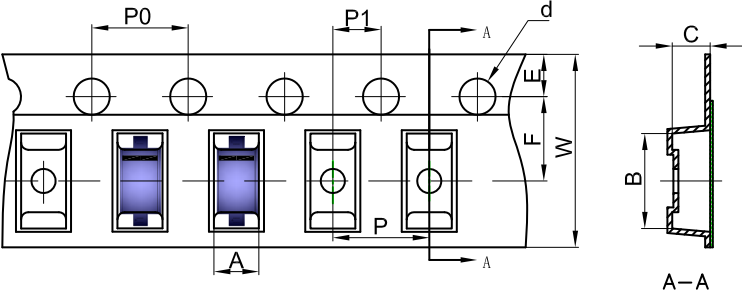
Part Number	Package	Shipping Quantity
RB160M-60	SOD-123	3000/tape&Reel

Marking Diagram



Reel Taping Specifications For Surface Mount Devices-SOD-123

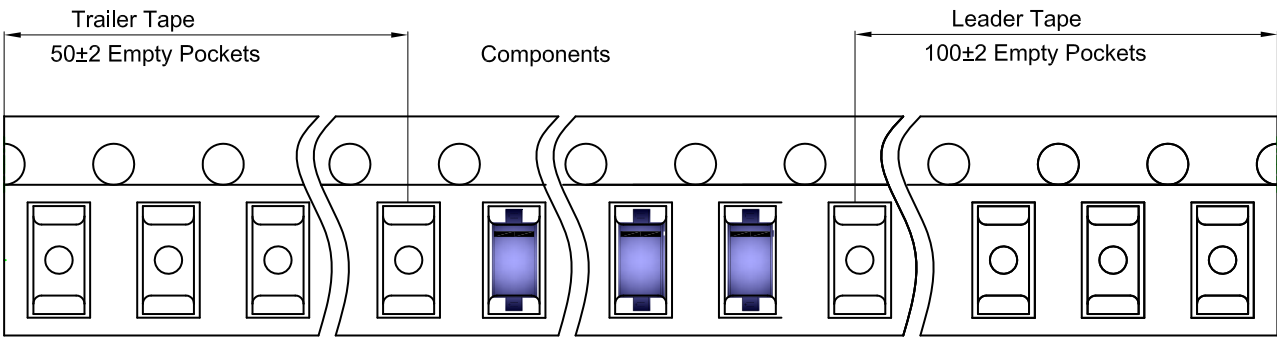
SOD-123 Embossed Carrier Tape



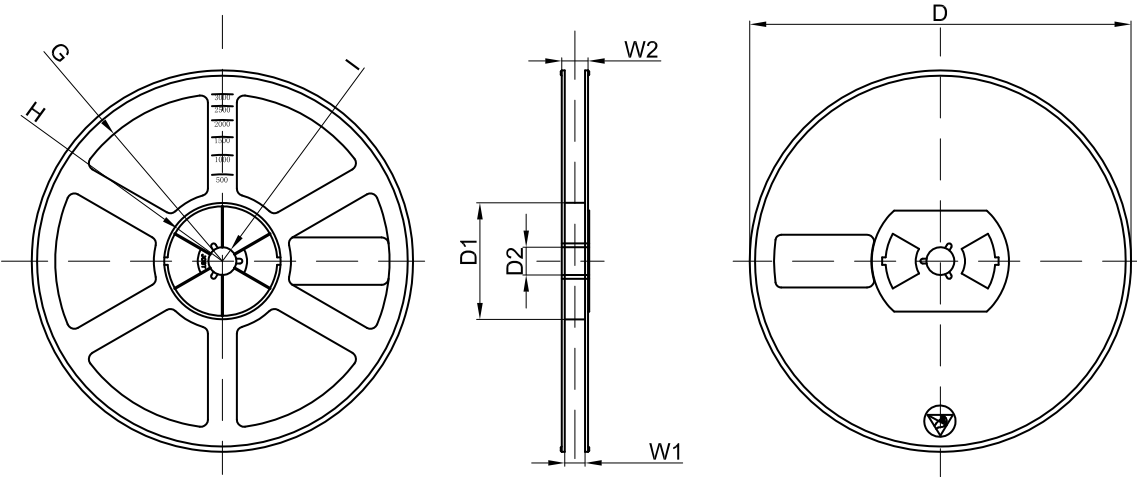
Packaging Description:
SOD-123 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter										
Pkg 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

SOD-123 Tape Leader and Trailer



SOD-123 Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7"Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	