

SOT-23 Plastic-Encapsulate Diodes

Switching Diodes

Features

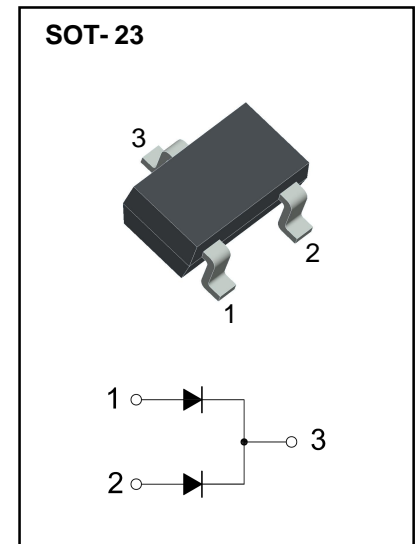
- High Speed
- High Reliability
- Suitable for High Packing Density Layout

Applications

- Extreme fast switches

Marking:

- N



Limiting Values(Absolute Maximum Rating)

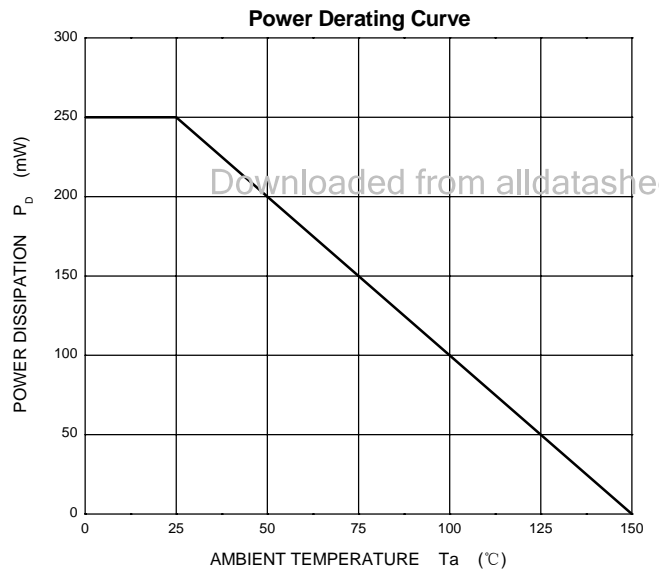
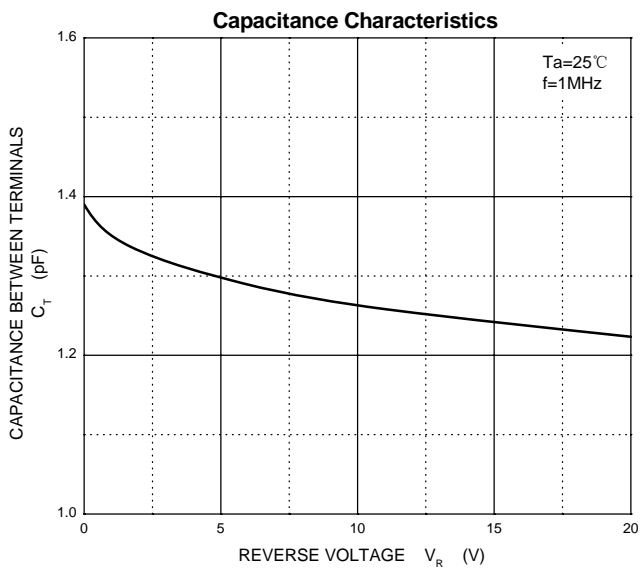
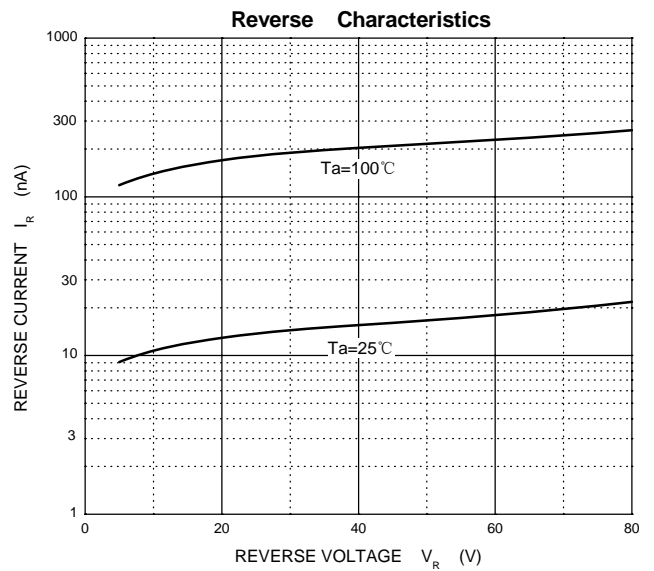
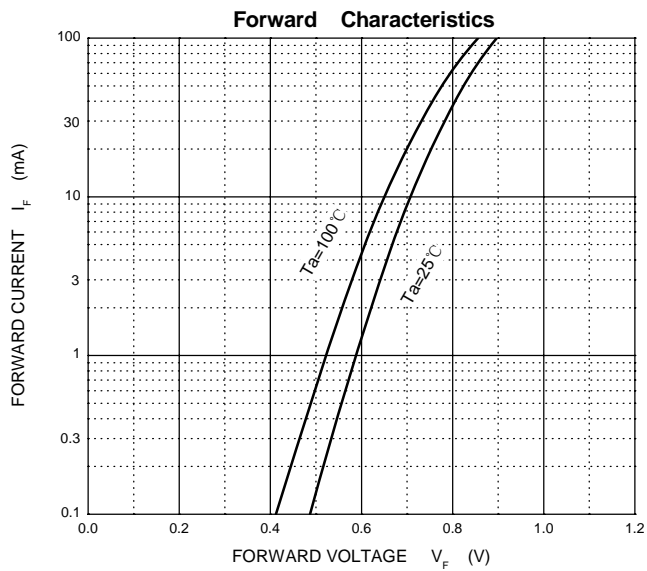
Symbol	Parameter	Value	Unit
V_R	DC Blocking Voltage	80	V
I_O	Continuous Forward Current	100	mA
I_{FM}	Peak Forward Current	300	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current@t=8.3ms	2	A
P_D	Power Dissipation	250	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	500	°C/W
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55~+150	°C

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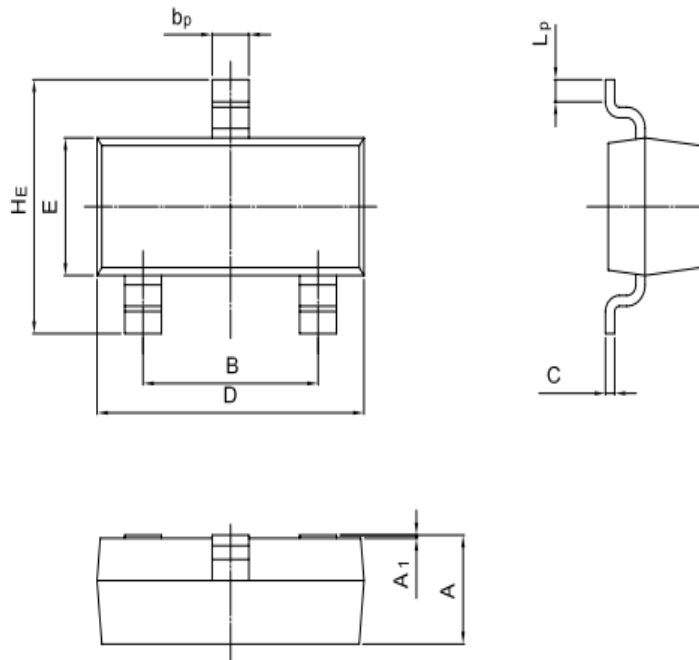
Electrical Characteristics (Ta=25°C Unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu A$	80			V
Reverse current	I_R	$V_R=70V$			0.1	μA
Forward voltage	V_F	$I_F=100mA$			1.2	V
Total capacitance	C_{tot}	$V_R=6V, f=1MHz$			3.5	pF
Reverse recovery time	t_{rr}	$I_F=I_R=5mA, V_R=6V$			4	ns

Typical Characteristics



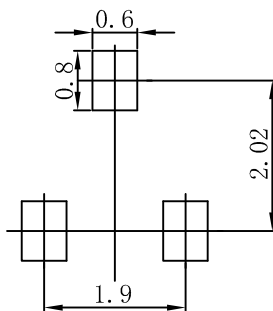
SOT-23 Package Outline Dimensions



UNIT	A	B	bp	C	D	E	HE	A1	Lp
mm	1.40 0.95	2.04 1.78	0.50 0.35	0.19 0.08	3.10 2.70	1.65 1.20	3.00 2.20	0.100 0.013	0.50 0.20

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SOT-23 Suggested Pad Layout



Note:

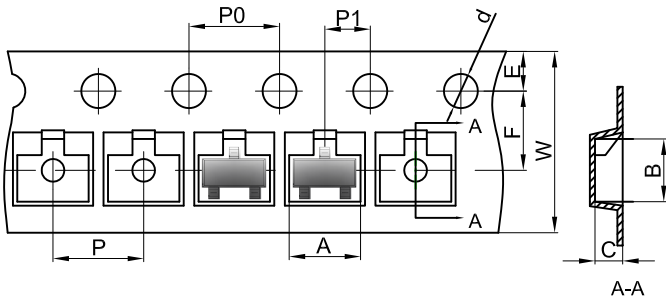
1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

NOTICE

JSJD reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSJD does not assume any liability arising out of the application or use of any product described herein.

Reel Taping Specifications For Surface Mount Devices-SOT-23

SOT-23 Embossed Carrier Tape

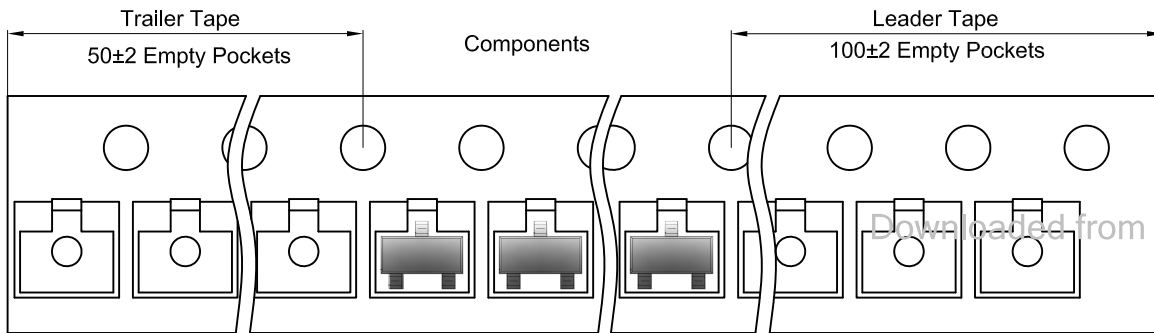


Packaging Description:

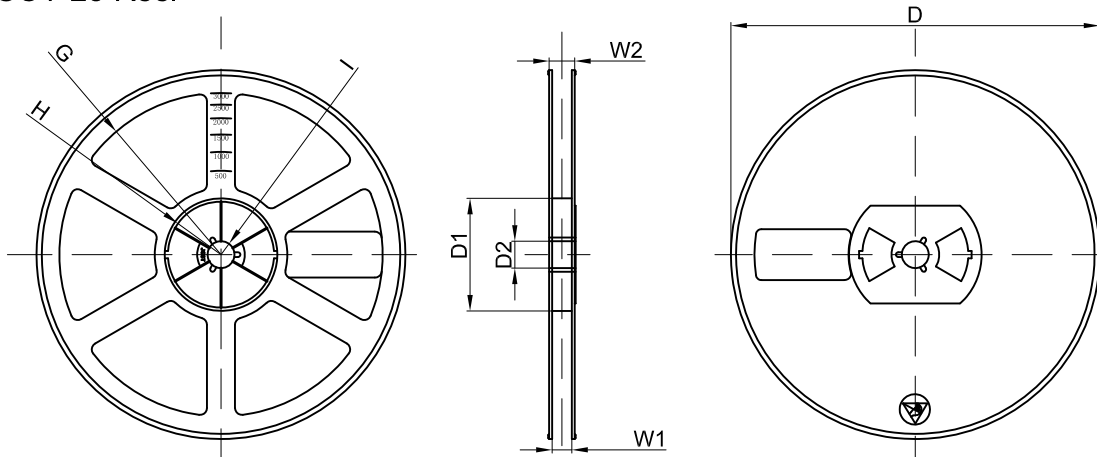
SOT-23 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in 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
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT-23 Tape Leader and Trailer



SOT-23 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	438×438×230	