

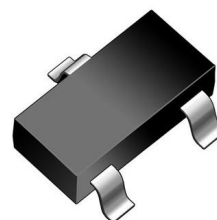
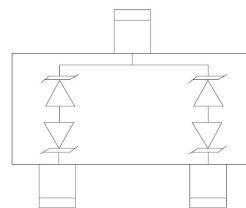


DONGGUAN NANJING ELECTRONICS LTD.,
SOT-23 Plastic-Encapsulate Diodes

ESDXXCC TVS Diode Array

Features

- ◆ 150 Watts peak pulse power ($t_p = 8/20\mu s$)
- ◆ Transient protection for high speed data lines to
IEC 61000-4-2 (ESD) $\pm 15kV$ (air), $\pm 8kV$ (contact)
IEC 61000-4-4 (EFT) 40A (5/50ns)
- ◆ Working voltages : 3V,5V,12V,15V,24V,36V
- ◆ Protects two bidirectional line
- ◆ Low operating and clamping voltages
- ◆ Solid-state silicon avalanche technology



SOT-23

Applications

- ◆ Notebooks, Desktops, Servers and Video Graphics Cards
- ◆ USB Power & Data Line Protection
- ◆ Monitors and Flat Panel Displays
- ◆ I²C Bus Protection
- ◆ Portable Instrumentation
- ◆ Set Top Box

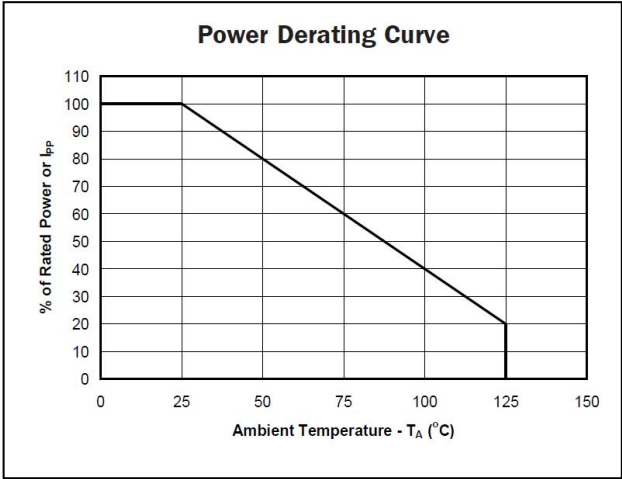
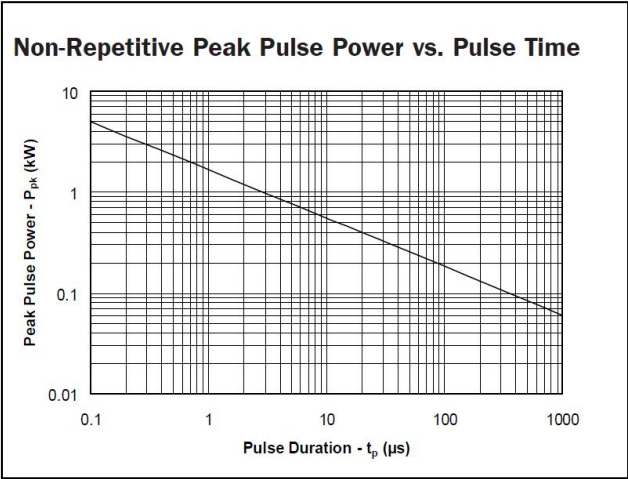
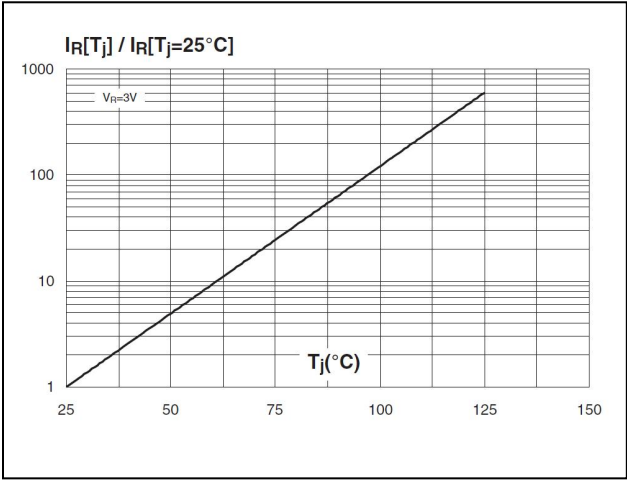
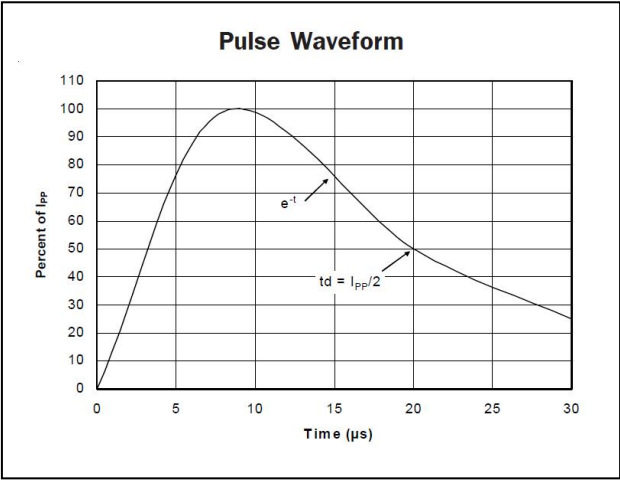
Maximum Rating @ $T_a = 25^\circ C$ unless otherwise specified

Symbol	Parameter	Ratings	Units
P_{PK}	Peak Pulse Power ($t_p = 8/20\mu s$)	150	Watts
T_L	Lead Soldering Temperature	260(10sec.)	$^\circ C$
T_J	Operating Temperature	-55 to +125	$^\circ C$
T_{STG}	Storage Temperature	-55 to +150	$^\circ C$

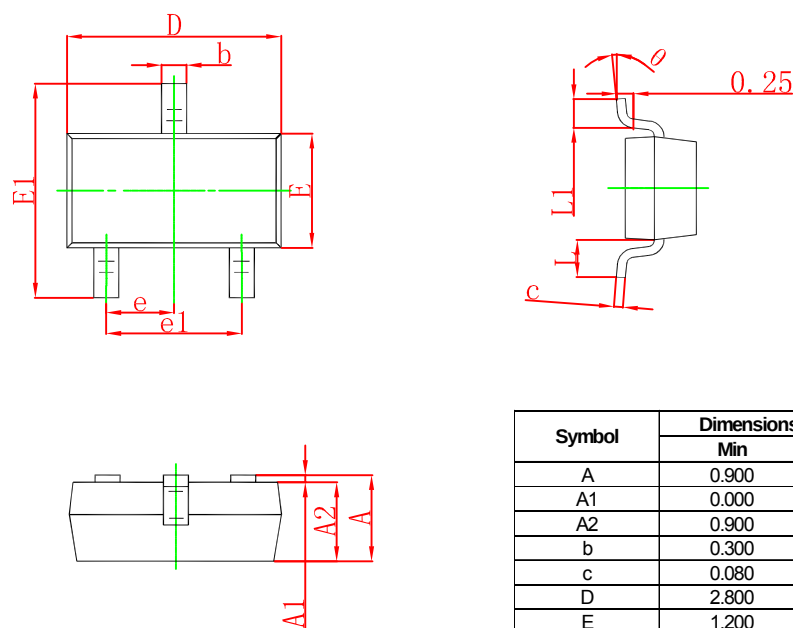
Electrical Characteristics@ Ta=25℃ unless otherwise

Part Number	Marking	V _{DRM}	I _{DRM}	V _{BR}	I _R	V _c	I _{pp}	V _c	I _{pp}	CO
		V	μA	V	mA	V	A	V	A	pF
			MAX	MIN		MAX		MAX		MAX
ESD03CC	V3t 18	3.3	1	4.5	1	9.8	1	13	12	100
ESD05CC	5B2	5	1	5.8	1	11.8	1	15	10	90
ESD12CC	12B2	12	1	13.2	1	19	1	25	6	60
ESD15CC	15B2	15	1	16.5	1	24	1	33	5	50
ESD24CC	24B2	24	1	26.1	1	44	1	54	3	30
ESD36CC	36B2	36	1	38.5	1	56	1	78	3	25

Typical Characteristics@ Ta=25°C unless otherwise specified

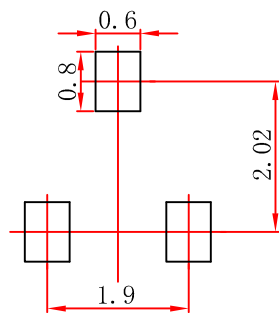


SOT-23 Package Outline Dimensions



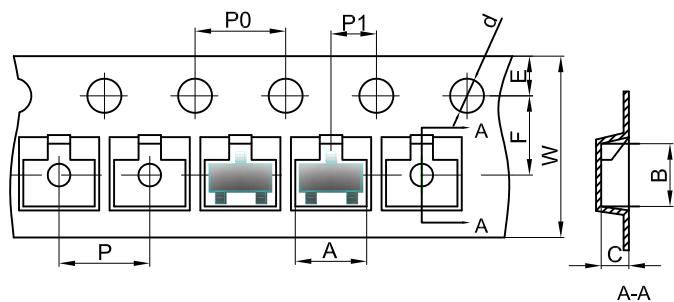
Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

SOT-23 Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

SOT-23 Embossed Carrier Tape

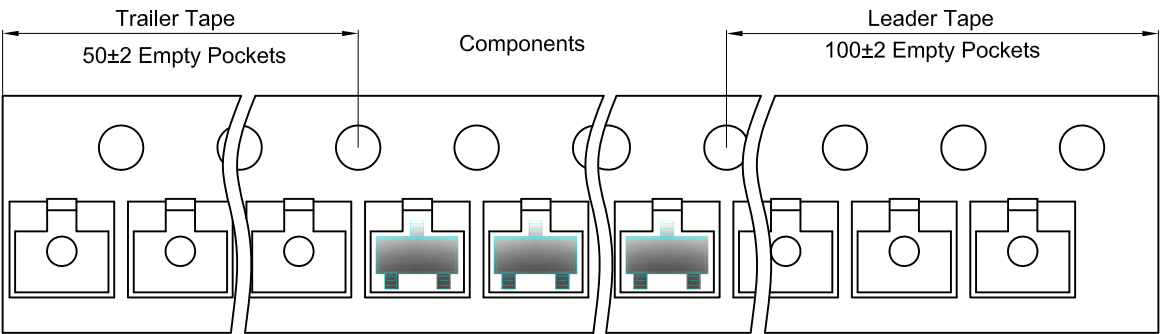


Packaging Description:

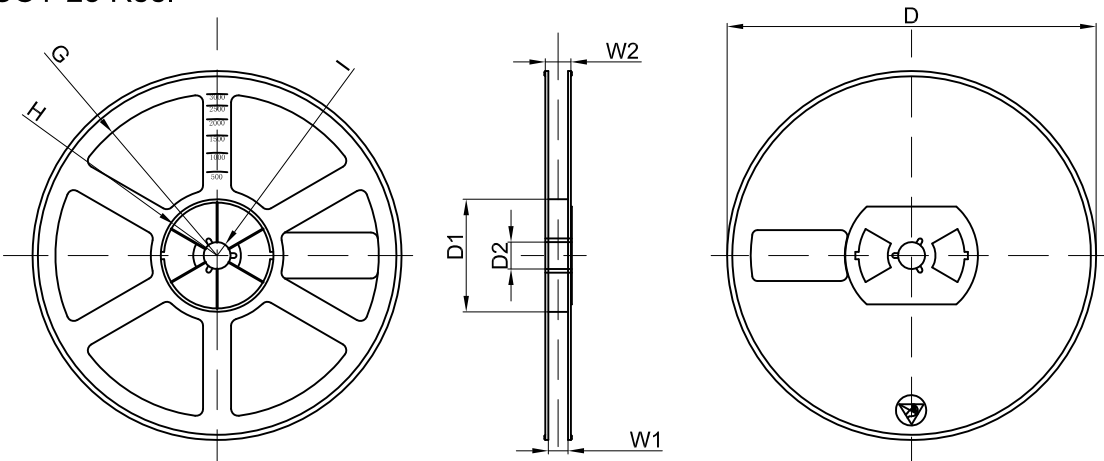
SOT-23 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in 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	438×438×220	