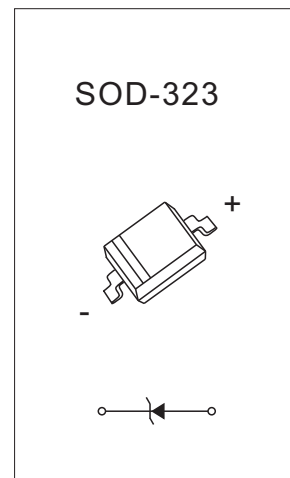


MMSZ5221BS-MMSZ5259BS Zener Diodes

FEATURES

Planar die construction
 Ultra-Small Surface Mount Package
 General purpose, medium current
 Ideally suited for automated assembly processes



MAXIMUM RATINGS(Ta=25°C)

Symbol	Parameter	Vaule	Unit
VF	Forward voltage @IF=10mA(Note 2)	0.9	V
PD	Power dissipation (Note 1)	200	mV
RθJA	Thermal Resistance Form Junction to Ambient	625	°C/W
TJ	Junction Temperature	150	°C
TSTG	Storage Temperature Range	-55~+150	°C

MMSZ5221BS-MMSZ5259BS

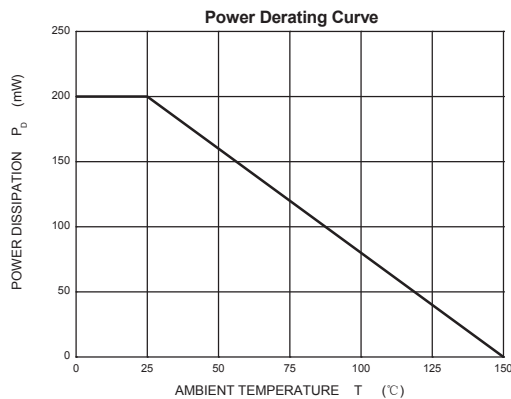
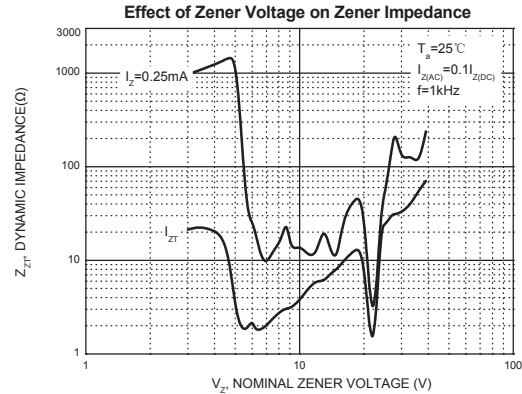
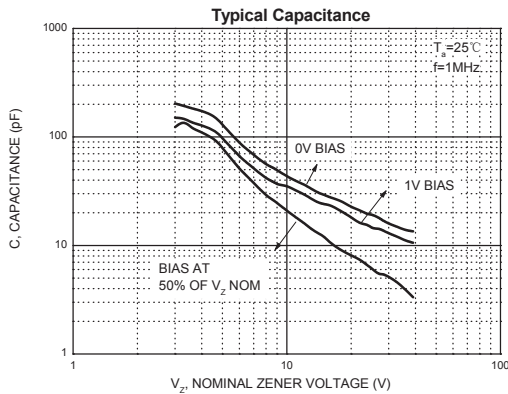
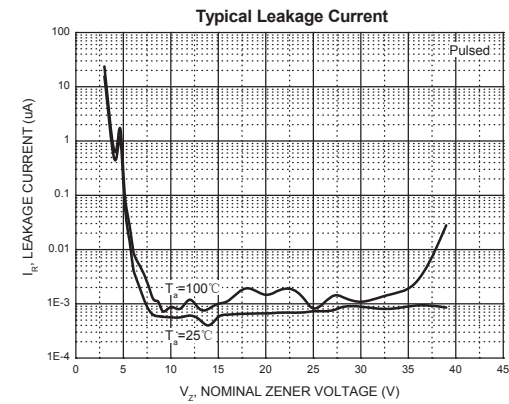
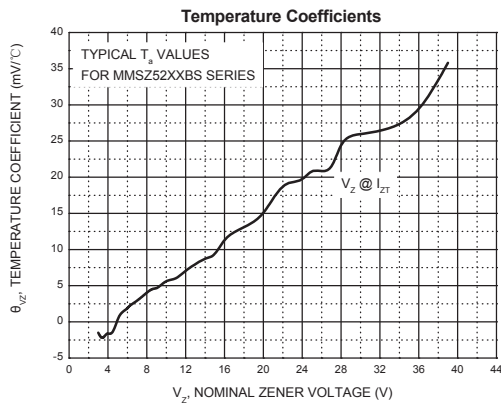
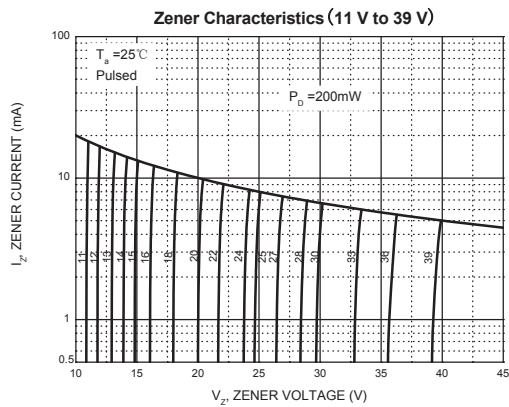
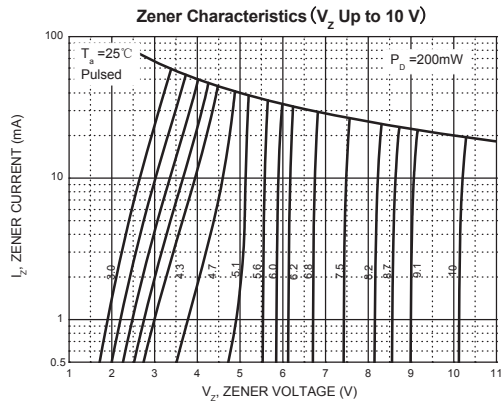
ELECTRICAL CHARACTERISTICS(Ta=25°C)

Type	Zener Voltage Range(Note 2)				Maximum Zener Impedance(Note 3)			Maximum Reverse Current		Marking
	V _Z @I _{ZT}			I _{ZT}	Z _{YT} @I _{ZT}	Z _{ZK} @I _{ZK}	I _{ZK}	I _R	V _R	
	Nom(V)	Min(V)	Max(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	
MMSZ5221BS	2.4	2.28	2.52	20	30	1200	0.25	100	1	C1
MMSZ5223BS	2.7	2.57	2.84	20	30	1300	0.25	75	1	C3
MMSZ5225BS	3	2.85	3.15	20	30	1600	0.25	50	1	C5
MMSZ5226BS	3.3	3.14	3.47	20	28	1600	0.25	25	1	G1
MMSZ5227BS	3.6	3.42	3.78	20	24	1700	0.25	15	1	G2
MMSZ5228BS	3.9	3.71	4.1	20	23	1900	0.25	10	1	G3
MMSZ5229BS	4.3	4.09	4.52	20	22	2000	0.25	5	1	G4
MMSZ5230BS	4.7	4.47	4.94	20	19	1900	0.25	5	2	G5
MMSZ5231BS	5.1	4.85	5.36	20	17	1600	0.25	5	2	E1
MMSZ5232BS	5.6	5.32	5.88	20	11	1600	0.25	5	3	E2
MMSZ5233BS	6	5.7	6.3	20	7	1600	0.25	5	3.5	E3
MMSZ5234BS	6.2	5.89	6.51	20	7	1000	0.25	5	4	E4
MMSZ5235BS	6.8	6.46	7.14	20	5	750	0.25	3	5	E5
MMSZ5236BS	7.5	7.13	7.88	20	6	500	0.25	3	6	F1
MMSZ5237BS	8.2	7.79	8.61	20	8	500	0.25	3	6.5	F2
MMSZ5238BS	8.7	8.27	9.14	20	8	600	0.25	3	6.5	F3
MMSZ5239BS	9.1	8.65	9.56	20	10	600	0.25	3	7	F4
MMSZ5240BS	10	9.5	10.5	20	17	600	0.25	3	8	F5
MMSZ5241BS	11	10.45	11.55	20	22	600	0.25	2	8.4	H1
MMSZ5242BS	12	11.4	12.6	20	30	600	0.25	1	9.1	H2
MMSZ5243BS	13	12.35	13.65	9.5	13	600	0.25	0.5	9.9	H3
MMSZ5244BS	14	13.3	14.7	9	15	600	0.25	0.1	10	H4
MMSZ5245BS	15	14.25	15.75	8.5	16	600	0.25	0.1	11	H5
MMSZ5246BS	16	15.2	16.8	7.8	17	600	0.25	0.1	12	J1
MMSZ5248BS	18	17.1	18.9	7	21	600	0.25	0.1	14	J3
CMMSZ5250BS	20	19	21	6.2	25	600	0.25	0.1	15	J5
MMSZ5251BS	22	20.9	23.1	5.6	29	600	0.25	0.1	17	K1
MMSZ5252BS	24	22.8	25.2	5.2	33	600	0.25	0.1	18	K2
MMSZ5253BS	24	23.75	26.25	5	35	600	0.25	0.1	19	K3
MMSZ5254BS	27	25.65	28.35	5	41	600	0.25	0.1	21	K4
MMSZ5255BS	28	28.5	29.4	4.5	44	600	0.25	0.1	21	K5
MMSZ5256BS	30	26.6	31.5	4.2	49	600	0.25	0.1	23	M1
MMSZ5257BS	33	31.35	34.65	3.8	58	700	0.25	0.1	25	M2
MMSZ5258BS	36	34.2	37.8	3.4	70	700	0.25	0.1	27	M3
MMSZ5259BS	39	37.05	40.95	3.2	80	800	0.25	0.1	30	M4

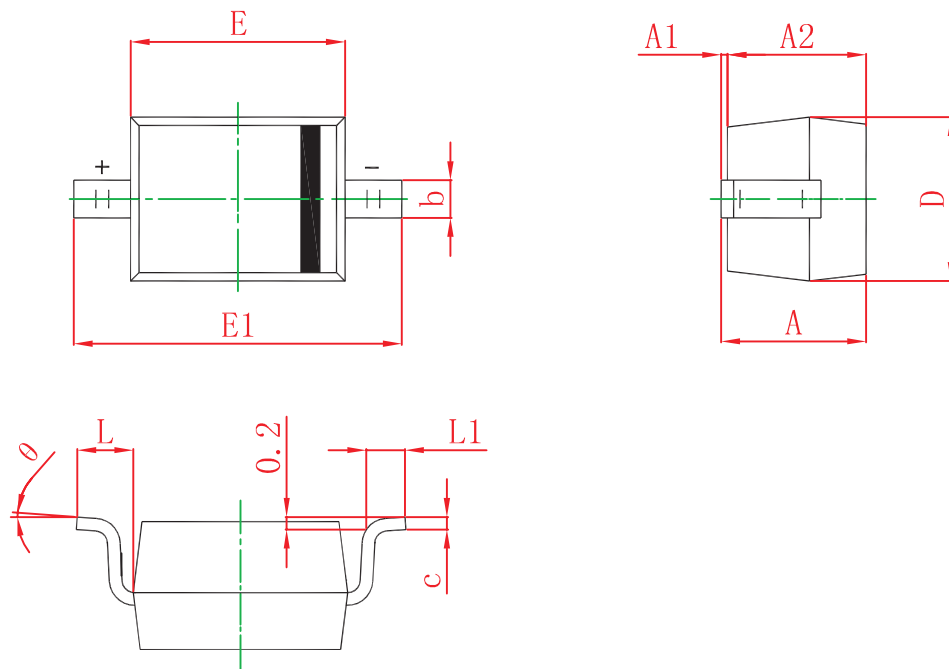
Notes: 1. Device mounted on ceramic PCB:7.6mm x 9.4mm x 0.87mm with pad areas 25mm².
2. Short duration test pulse used to minimize self-heating effect.
3. f=1kHz..

MMSZ5221BS-MMSZ5259BS

TYPICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)



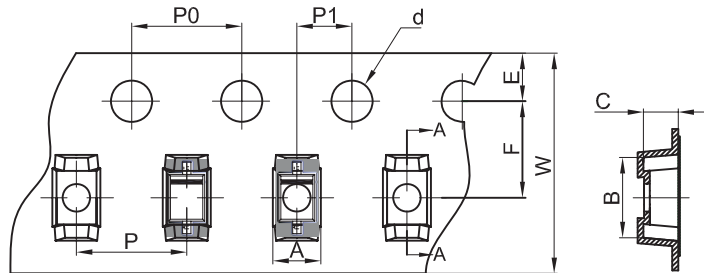
SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.100		0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.040
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.700	0.098	0.106
L	0.475 REF.		0.019 REF.	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

SOD-323 Tape and reel

SOD-323 Embossed Carrier Tape

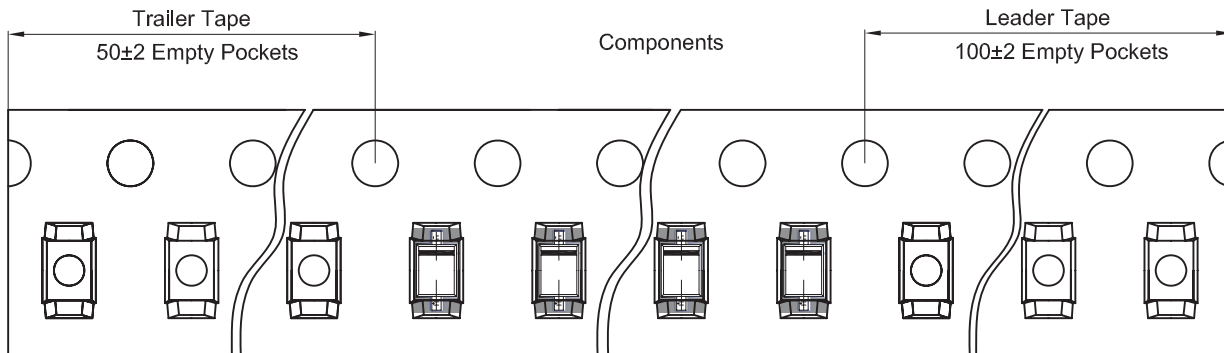


Packaging Description:

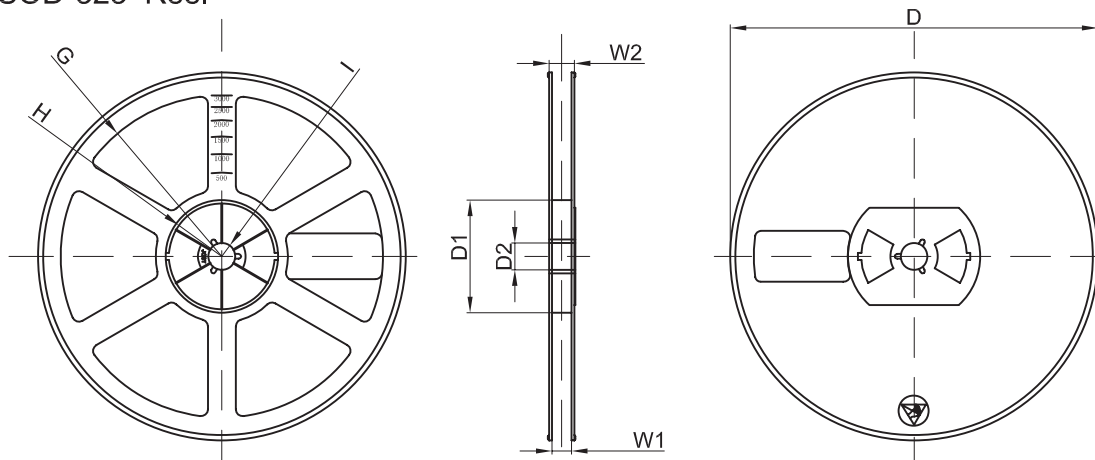
SOD-323 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts 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-323	1.46	2.90	1.25	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00
(Tolerance)	+/-0.05	+/-0.05	+/-0.05	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+0.3/-0.1

SOD-323 Tape Leader and Trailer



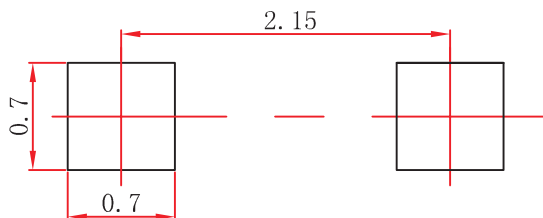
SOD-323 Reel



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
Tolerance	+/-2	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1

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	

SOD-323 Suggested Pad size



中心距：2.15

脚宽：0.30

焊盘宽：0.70

脚长：0.475

焊盘长：0.70

技术要求

1. 塑封体尺寸 1.70×1.30 ;
2. 未注公差为： ± 0.05 ;
3. 所有单位为：mm。

Unit: mm

ZOHE ELECTRONIC TECHNOLOGY PACKING PROCESS

