

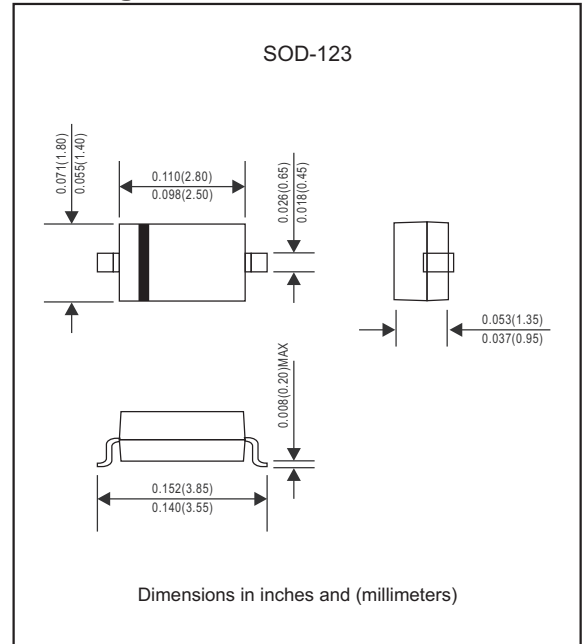
Features

- Silicon epitaxial planar chip structure.
- Zener breakdown voltage range, 2.4V to 75V
- Small package size for high density applications.
- Ideally suited for automated assembly processes.
- Pb-Free package is available.
- Compliant to Halogen-free
- Suffix "-Q1" for AEC-Q101

Mechanical data

- Epoxy : UL94-V0 rated flame retardant
- Case : Molded plastic, SOD-123
- Terminals : Plated terminals, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Mounting Position : Any

Package outline



Maximum ratings (at $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Total power dissipation	at $T_A=25^{\circ}\text{C}$	P_D			500	mW
Operating junction temperature range		T_J	-55		+150	$^{\circ}\text{C}$
Storage temperature range		T_{STG}	-65		+125	$^{\circ}\text{C}$

Electrical characteristics (at $T_A=25\text{ }^{\circ}\text{C}$ unless otherwise noted)

Type Number	Marking Code	Zener Voltage Range (Note 2)				Maximum Zener Impedance (Note 4)			Maximum Reverse Current	
		$V_Z@I_{ZT}$			I_{ZT}	$Z_{ZT}@I_{ZT}$	$Z_{ZK}@I_{ZK}$	I_{ZK}	I_R	V_R
		Nom(V)	Min(V)	Max(V)	mA	Ω		mA	μA	V
MMSZ5221B-Q1	C1	2.4	2.28	2.52	20	30	1200	0.25	100	1.0
MMSZ5222B-Q1	C2	2.5	2.38	2.63	20	30	1250	0.25	100	1.0
MMSZ5223B-Q1	C3	2.7	2.57	2.84	20	30	1300	0.25	75	1.0
MMSZ5224B-Q1	C4	2.8	2.66	2.94	20	30	1400	0.25	75	1.0
MMSZ5225B-Q1	C5	3.0	2.85	3.15	20	30	1600	0.25	50	1.0
MMSZ5226B-Q1	G1	3.3	3.14	3.47	20	28	1600	0.25	25	1.0
MMSZ5227B-Q1	G2	3.6	3.42	3.78	20	24	1700	0.25	15	1.0
MMSZ5228B-Q1	G3	3.9	3.71	4.10	20	23	1900	0.25	10	1.0
MMSZ5229B-Q1	G4	4.3	4.09	4.52	20	22	2000	0.25	5	1.0
MMSZ5230B-Q1	G5	4.7	4.47	4.94	20	19	1900	0.25	5	2.0
MMSZ5231B-Q1	E1	5.1	4.85	5.36	20	17	1600	0.25	5	2.0
MMSZ5232B-Q1	E2	5.6	5.32	5.88	20	11	1600	0.25	5	3.0
MMSZ5233B-Q1	E3	6.0	5.70	6.30	20	7	1600	0.25	5	3.5
MMSZ5234B-Q1	E4	6.2	5.89	6.51	20	7	1000	0.25	5	4.0
MMSZ5235B-Q1	E5	6.8	6.46	7.14	20	5	750	0.25	3	5.0
MMSZ5236B-Q1	F1	7.5	7.13	7.88	20	6	500	0.25	3	6.0
MMSZ5237B-Q1	F2	8.2	7.79	8.61	20	8	500	0.25	3	6.5
MMSZ5238B-Q1	F3	8.7	8.27	9.14	20	8	600	0.25	3	6.5
MMSZ5239B-Q1	F4	9.1	8.65	9.56	20	10	600	0.25	3	7.0
MMSZ5240B-Q1	F5	10	9.50	10.50	20	17	600	0.25	3	8.0
MMSZ5241B-Q1	H1	11	10.45	11.55	20	22	600	0.25	2.0	8.4
MMSZ5242B-Q1	H2	12	11.40	12.60	20	30	600	0.25	1.0	9.1
MMSZ5243B-Q1	H3	13	12.35	13.65	9.5	13	600	0.25	0.5	9.9
MMSZ5244B-Q1	H4	14	13.30	14.70	9.0	15	600	0.25	0.1	10
MMSZ5245B-Q1	H5	15	14.25	15.75	8.5	16	600	0.25	0.1	11
MMSZ5246B-Q1	J1	16	15.20	16.80	7.8	17	600	0.25	0.1	12
MMSZ5247B-Q1	J2	17	16.15	17.85	7.5	19	600	0.25	0.1	13
MMSZ5248B-Q1	J3	18	17.10	18.90	7.0	21	600	0.25	0.1	14
MMSZ5249B-Q1	J4	19	18.05	19.95	6.6	23	600	0.25	0.1	14
MMSZ5250B-Q1	J5	20	19.00	21.00	6.2	25	600	0.25	0.1	15
MMSZ5251B-Q1	K1	22	20.90	23.10	5.6	29	600	0.25	0.1	17
MMSZ5252B-Q1	K2	24	22.80	25.20	5.2	33	600	0.25	0.1	18
MMSZ5253B-Q1	K3	25	23.75	26.25	5.0	35	600	0.25	0.1	19
MMSZ5254B-Q1	K4	27	25.65	28.35	5.0	41	600	0.25	0.1	21
MMSZ5255B-Q1	K5	28	26.60	29.40	4.5	44	600	0.25	0.1	21
MMSZ5256B-Q1	M1	30	28.50	31.50	4.2	49	600	0.25	0.1	23
MMSZ5257B-Q1	M2	33	31.35	34.65	3.8	58	700	0.25	0.1	25
MMSZ5258B-Q1	M3	36	34.20	37.80	3.4	70	700	0.25	0.1	27
MMSZ5259B-Q1	M4	39	37.05	40.95	3.2	80	800	0.25	0.1	30



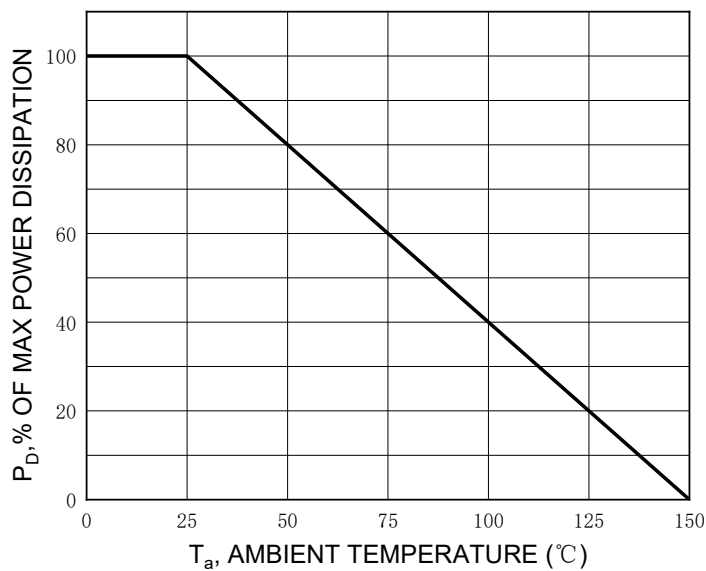
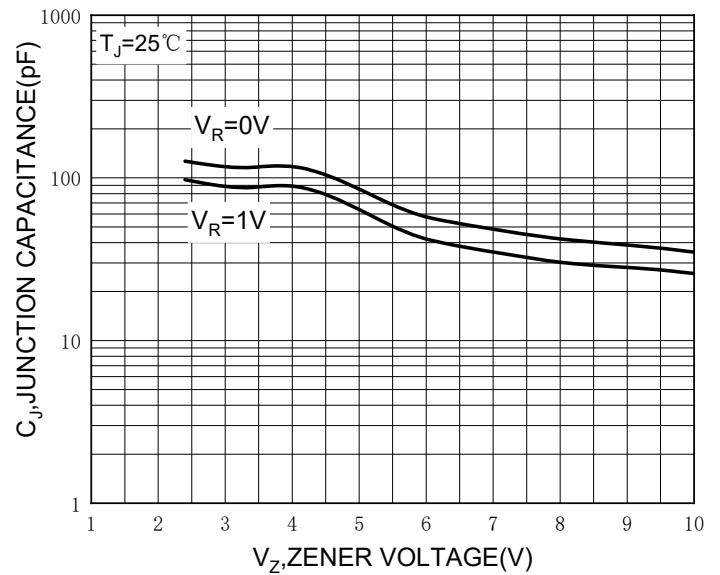
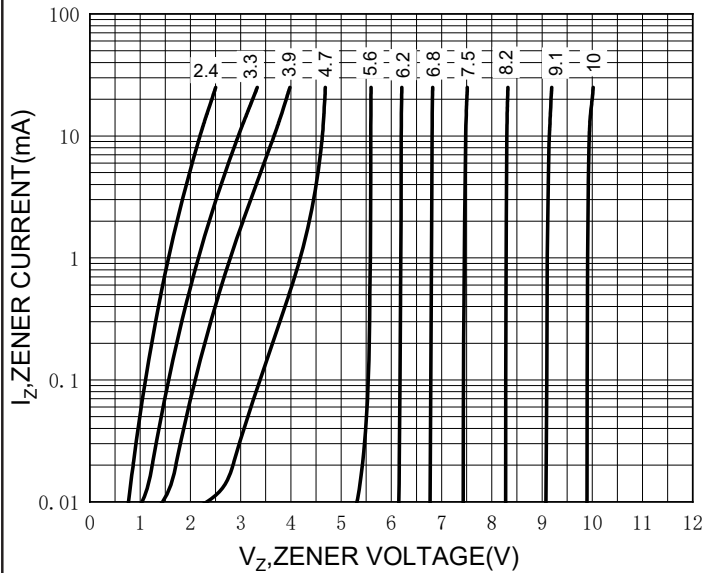
Electrical characteristics (at $T_A=25^{\circ}\text{C}$ unless otherwise noted)

Type Number	Marking Code	Zener Voltage Range (Note 2)				Maximum Zener Impedance (Note 4)			Maximum Reverse Current	
		$V_Z@I_{ZT}$			I_{ZT}	$Z_{ZT}@I_{ZT}$	$Z_{ZK}@I_{ZK}$	I_{ZK}	I_R	V_R
		Nom(V)	Min(V)	Max(V)	mA	Ω		mA	μA	V
MMSZ5260B-Q1	M5	43	40.85	45.15	3.0	93	900	0.25	0.1	33
MMSZ5261B-Q1	N1	47	44.65	49.35	2.7	105	1000	0.25	0.1	36
MMSZ5262B-Q1	N2	51	48.45	53.55	2.5	125	1100	0.25	0.1	39
MMSZ5263B-Q1	N3	56	53.20	58.80	2.2	150	1300	0.25	0.1	43
MMSZ5264B-Q1	N4	60	57.00	63.00	2.1	170	1400	0.25	0.1	46
MMSZ5265B-Q1	N5	62	58.90	65.10	2.0	185	1400	0.25	0.1	47
MMSZ5266B-Q1	P1	68	64.60	71.40	1.8	230	1600	0.25	0.1	52
MMSZ5267B-Q1	P2	75	71.25	78.75	1.7	270	1700	0.25	0.1	56



Rating and characteristic curves

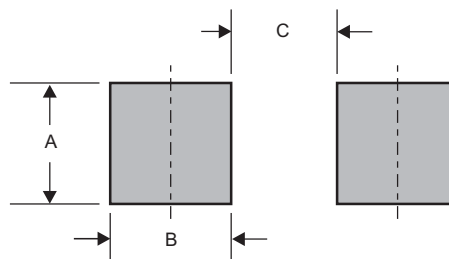
ZENER BREAKDOWN CHARACTERISTICS



Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SOD-123	0.048 (1.22)	0.036 (0.91)	0.093 (2.36)