

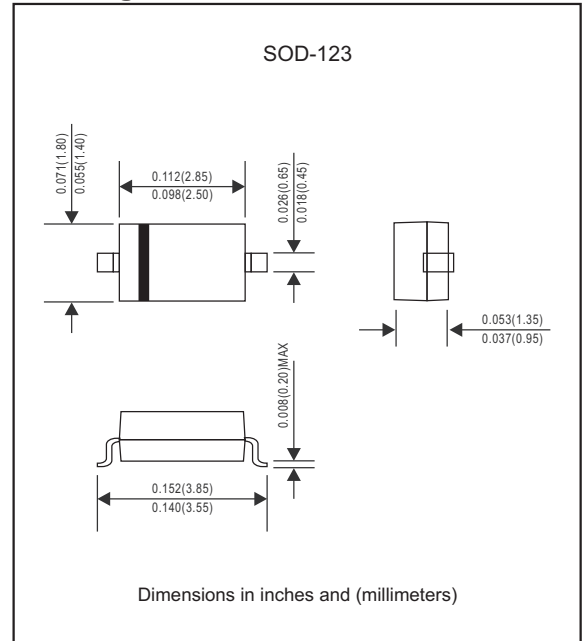
Features

- Zener breakdown voltage range.3.3V-56V
- Small package size for high density applications.
- Ideally suited for automated assembly processes.
- Compliant to Halogen-free
- Suffix "-Q1" for AEC-Q101

Mechanical data

- Case : Molded plastic, SOD-123
- Polarity : Indicated by cathode band
- Mounting Position : Any

Package outline



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

Parameter	Symbol	Value	Unit
Forward Voltage @ $I_F=10\text{mA}$	V_F	0.9	V
Power Dissipation (Collector)	P_C	500	mW
Thermal Resistance (Junction-to-Ambient)	$R_{\theta JA}$	250	$^{\circ}\text{C/W}$
Thermal Resistance (Junction-to-Case)	$R_{\theta JC}$	140	$^{\circ}\text{C/W}$
Junction Temperature Range	T_J	-55 ~ +150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-65 ~ +150	$^{\circ}\text{C}$

Note: These ratings are limiting values above which the serviceability of the diodes may be impaired.

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

Part Number	Marking Code	Zener Voltage V_Z (V)			@ I_{ZT} (mA)	Maximum Zener Impedance			Maximum Reverse Current I_R (μA)	@ V_R (V)
		Min.	Typ.	Max.		Z_{ZT} (Ω) @ I_{ZT}	Z_{ZK} (Ω)	@ I_{ZK} (mA)		
MMSZ5226A-Q1	D1	3.23	3.30	3.37	20.0	28	1600	0.25	5.000	1.0
MMSZ5227A-Q1	D2	3.53	3.60	3.67	20.0	24	1700	0.25	5.000	1.0
MMSZ5228A-Q1	D3	3.82	3.90	3.98	20.0	23	1900	0.25	5.000	1.0
MMSZ5229A-Q1	D4	4.21	4.30	4.39	20.0	22	2000	0.25	5.000	1.0
MMSZ5230A-Q1	D5	4.61	4.70	4.79	20.0	19	1900	0.25	5.000	2.0
MMSZ5231A-Q1	E1	5.00	5.10	5.20	20.0	17	1600	0.25	5.000	2.0
MMSZ5232A-Q1	E2	5.49	5.60	5.71	20.0	11	1600	0.25	5.000	3.0
MMSZ5233A-Q1	E3•	5.88	6.00	6.12	20.0	7	1600	0.25	5.000	3.5
MMSZ5234A-Q1	E4	6.08	6.20	6.32	20.0	7	1000	0.25	5.000	4.0
MMSZ5235A-Q1	E5	6.66	6.80	6.94	20.0	5	750	0.25	3.000	5.0
MMSZ5236A-Q1	F1	7.35	7.50	7.65	20.0	6	500	0.25	3.000	6.0
MMSZ5237A-Q1	F2	8.04	8.20	8.36	20.0	8	500	0.25	3.000	6.0
MMSZ5238A-Q1	F3•	8.53	8.70	8.87	20.0	8	600	0.25	3.000	6.0
MMSZ5239A-Q1	F4	8.92	9.10	9.28	20.0	10	600	0.25	3.000	6.5
MMSZ5240A-Q1	F5	9.80	10.00	10.20	20.0	17	600	0.25	3.000	8.0
MMSZ5241A-Q1	H1	10.78	11.00	11.22	20.0	22	600	0.25	3.000	8.4
MMSZ5242A-Q1	H2	11.76	12.00	12.24	20.0	30	600	0.25	2.000	9.1
MMSZ5243A-Q1	H3	12.74	13.00	13.26	9.5	13	600	0.25	1.000	9.9
MMSZ5244A-Q1	H4	13.72	14.00	14.28	9.0	15	600	0.25	0.500	10.5
MMSZ5245A-Q1	H5	14.70	15.00	15.30	8.5	16	600	0.25	0.500	11.0
MMSZ5246A-Q1	J1	15.68	16.00	16.32	7.8	17	600	0.25	0.100	12.0
MMSZ5247A-Q1	J2•	16.66	17.00	17.34	7.5	19	600	0.25	0.100	13.0
MMSZ5248A-Q1	J3	17.64	18.00	18.36	7.0	21	600	0.25	0.100	14.0
MMSZ5250A-Q1	J5	19.60	20.00	20.40	6.2	25	600	0.25	0.100	15.0
MMSZ5251A-Q1	K1	21.56	22.00	22.44	5.6	29	600	0.25	0.100	17.0
MMSZ5252A-Q1	K2	23.52	24.00	24.48	5.2	33	600	0.25	0.100	18.0
MMSZ5253A-Q1	K3	24.50	25.00	25.50	5.0	35	600	0.25	0.100	19.0
MMSZ5254A-Q1	K4	26.46	27.00	27.54	5.0	41	600	0.25	0.100	21.0
MMSZ5255A-Q1	K5	27.44	28.00	28.56	4.5	44	600	0.25	0.100	21.0
MMSZ5256A-Q1	M1	29.40	30.00	30.60	4.2	49	600	0.25	0.100	23.0
MMSZ5257A-Q1	M2	32.34	33.00	33.66	3.8	58	700	0.25	0.100	25.0
MMSZ5258A-Q1	M3	35.28	36.00	36.72	3.4	70	700	0.25	0.100	27.0
MMSZ5259A-Q1	M4	38.22	39.00	39.78	3.2	80	800	0.25	0.100	30.0
MMSZ5260A-Q1	M5	42.14	43.00	43.86	3.0	93	900	0.25	0.100	33.0
MMSZ5261A-Q1	N1	46.06	47.00	47.94	2.7	105	1000	0.25	0.100	36.0
MMSZ5262A-Q1	N2	49.98	51.00	52.02	2.5	125	1000	0.25	0.100	39.0
MMSZ5263A-Q1	3A	54.88	56.00	57.12	2.2	150	1300	0.25	0.100	43.0

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

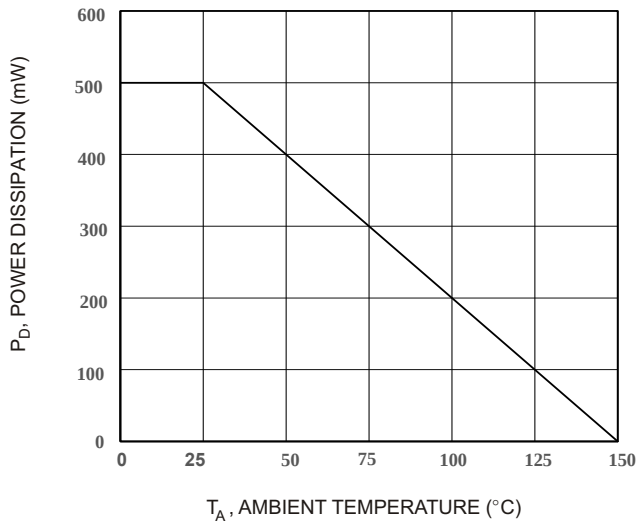


Fig. 1 Power Dissipation vs Ambient Temperature

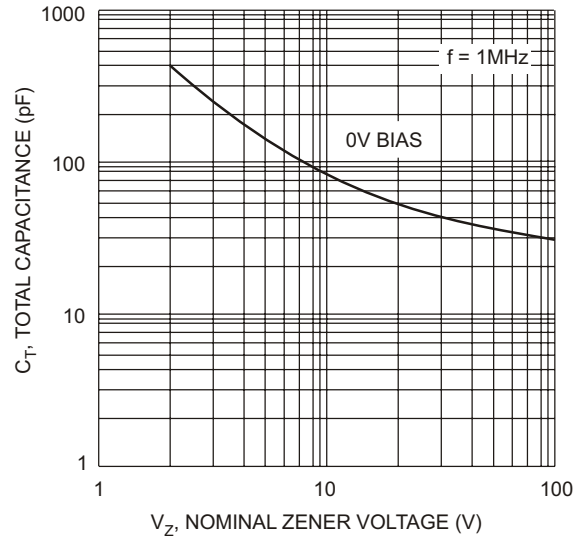


Fig. 2 Typical Capacitance

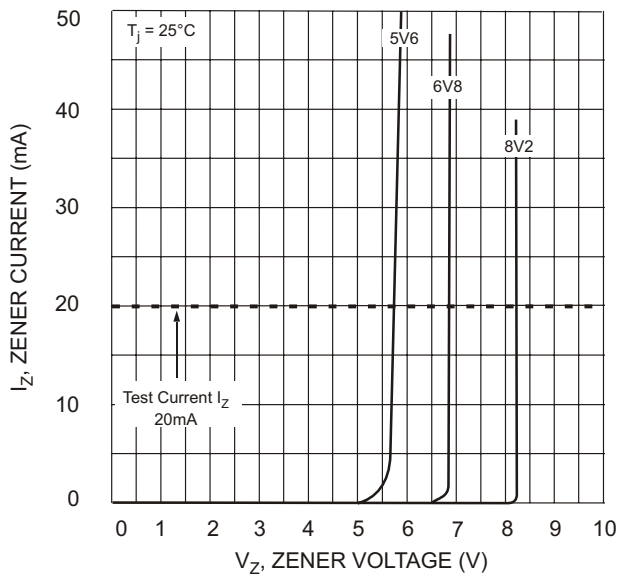


Fig. 3 Zener Breakdown Characteristics

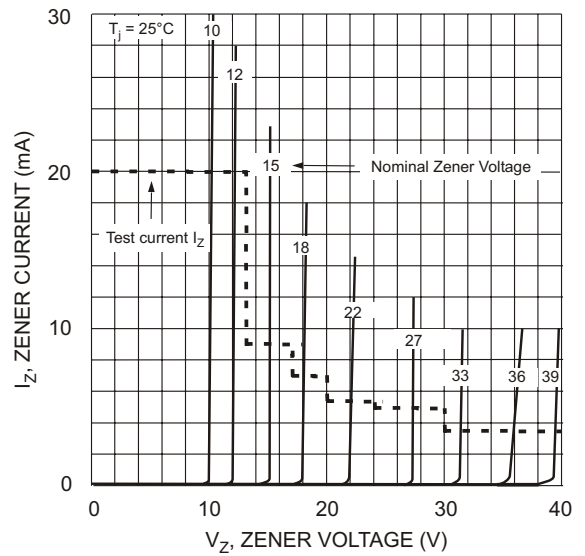
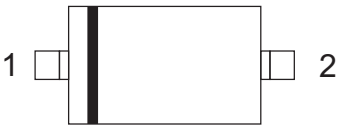
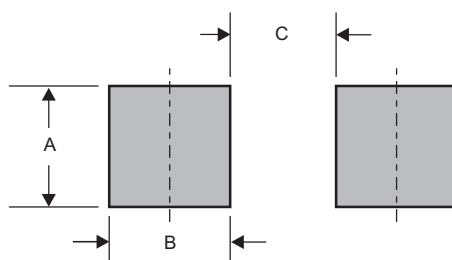


Fig. 4 Zener Breakdown Characteristics

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)