

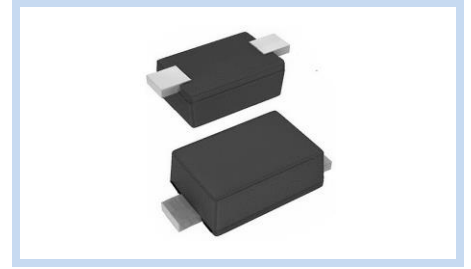
Zener Diodes SOD-323F, AEC-Q101

MMSZ52-CS-A Series

MERITEK

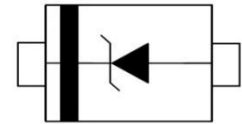
FEATURE

- Zener Voltage Range: 4.3~51V
- Zener Voltage Tolerance: $\pm 2\%$
- Power Dissipation: 200mW
- Ideally Suited for Automated Assembly Processes
- Application: Power Management Systems, Voltage Regulation
- AEC-Q101 Qualified



MECHANICAL DATA

- Case: SOD-323F, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Band Marking Denotes Cathode End



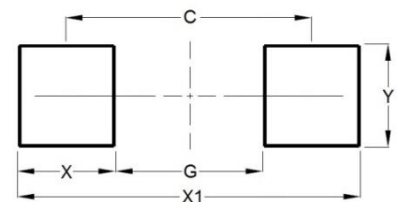
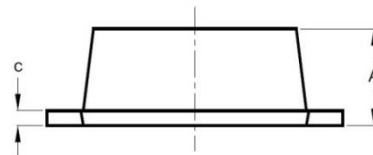
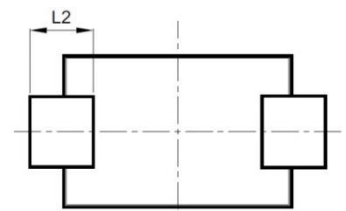
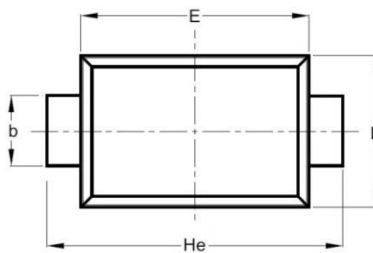
ABSOLUTE MAXIMUM RATINGS

Parameter	Symbols	Value	Unit
Power Dissipation	P_D	200	mW
Junction Temperature	T_J	-55~+150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55~+150	$^{\circ}\text{C}$

Note: $T_A = 25^{\circ}\text{C}$ unless otherwise noted

DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A	0.70	0.90
b	0.25	0.35
c	0.05	0.15
D	1.15	1.35
E	1.75	1.95
He	2.30	2.70
L2	0.30	-
C	2.17	2.17
G	1.44	1.44
X	0.73	0.73
X1	2.90	2.90
Y	0.50	0.50



Zener Diodes

SOD-323F, AEC-Q101

MMSZ52-CS-A Series

MERITEK

ELECTRICAL CHARACTERISTICS

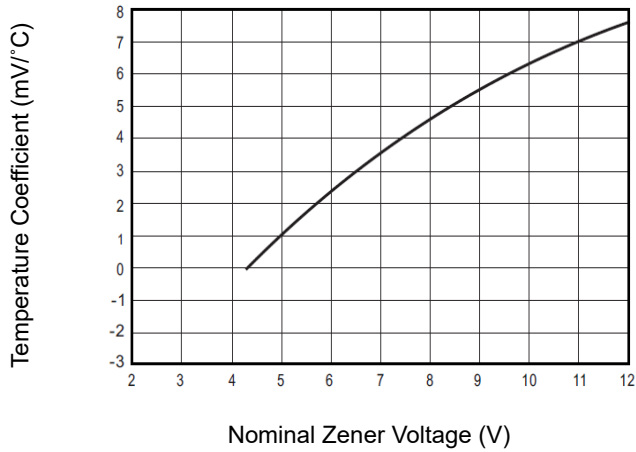
Part Number	Nominal Zener Voltage V_Z at I_{ZT}			Max Zener Impedance Z_{ZT} at I_{ZT} , Z_{ZK} at $I_{ZK}=0.25mA$			Reverse Leakage Current I_R at V_R	
	Nom	Min	Max	Z_{ZT}	I_{ZT}	Z_{ZK}	I_R max	V_R
	(V)	(V)	(V)	(Ω)	(mA)	(Ω)	(μA)	(V)
MMSZ5229CS-A	4.3	4.21	4.39	22	20	2000	5.0	1.0
MMSZ5230CS-A	4.7	4.61	4.79	19	20	1900	5.0	2.0
MMSZ5231CS-A	5.1	5.00	5.20	17	20	1600	5.0	2.0
MMSZ5232CS-A	5.6	5.49	5.71	11	20	1600	5.0	3.0
MMSZ5234CS-A	6.2	6.08	6.32	7	20	1000	5.0	4.0
MMSZ5235CS-A	6.8	6.66	6.94	5	20	750	3.0	5.0
MMSZ5236CS-A	7.5	7.35	7.65	6	20	500	3.0	6.0
MMSZ5237CS-A	8.2	8.04	8.36	8	20	500	3.0	6.0
MMSZ5238CS-A	8.7	8.53	8.87	8	20	600	3.0	6.5
MMSZ5239CS-A	9.1	8.92	9.28	10	20	600	3.0	6.5
MMSZ5240CS-A	10	9.80	10.20	17	20	600	3.0	8.0
MMSZ5241CS-A	11	10.78	11.22	22	20	600	2.0	8.4
MMSZ5242CS-A	12	11.76	12.24	30	20	600	1.0	9.1
MMSZ5243CS-A	13	12.74	13.26	13	9.5	600	0.5	9.9
MMSZ5244CS-A	14	13.72	14.28	15	9.0	600	0.1	10.5
MMSZ5245CS-A	15	14.70	15.30	16	8.5	600	0.1	11
MMSZ5246CS-A	16	15.68	16.32	17	7.8	600	0.1	12
MMSZ5247CS-A	17	16.66	17.34	19	7.5	600	0.1	13
MMSZ5248CS-A	18	17.64	18.36	21	7.0	600	0.1	14
MMSZ5250CS-A	20	19.60	20.40	25	6.2	600	0.1	15
MMSZ5251CS-A	22	21.56	22.44	29	5.6	600	0.1	17
MMSZ5252CS-A	24	23.52	24.48	33	5.2	600	0.1	18
MMSZ5254CS-A	27	26.46	27.54	41	5.0	600	0.1	21
MMSZ5255CS-A	28	27.44	28.56	44	4.5	600	0.1	21
MMSZ5256CS-A	30	29.40	30.60	49	4.2	600	0.1	23
MMSZ5257CS-A	33	32.34	33.66	58	3.8	700	0.1	25
MMSZ5258CS-A	36	35.28	36.72	70	3.4	700	0.1	27
MMSZ5259CS-A	39	38.22	39.78	80	3.2	800	0.1	30
MMSZ5260CS-A	43	42.14	43.86	93	3.0	900	0.1	33
MMSZ5261CS-A	47	46.06	47.94	105	2.7	1000	0.1	36
MMSZ5262CS-A	51	49.98	52.02	125	2.5	1100	0.1	39

Note:

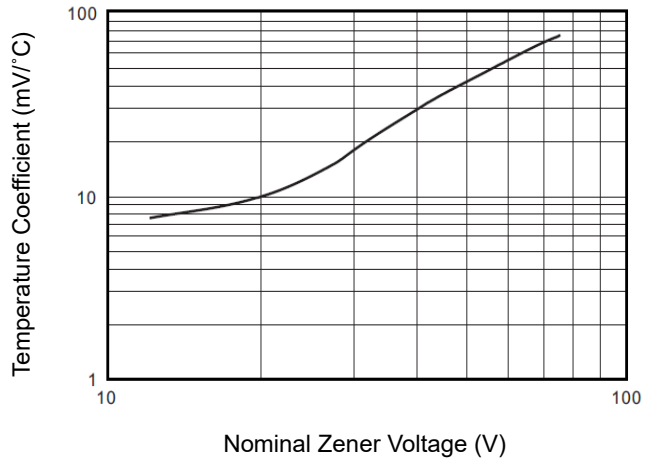
1. $T_A=25^{\circ}C$ unless otherwise noted
2. Mounted on $5mm^2$ (0.013mm thick) land areas

CHARACTERISTIC CURVES

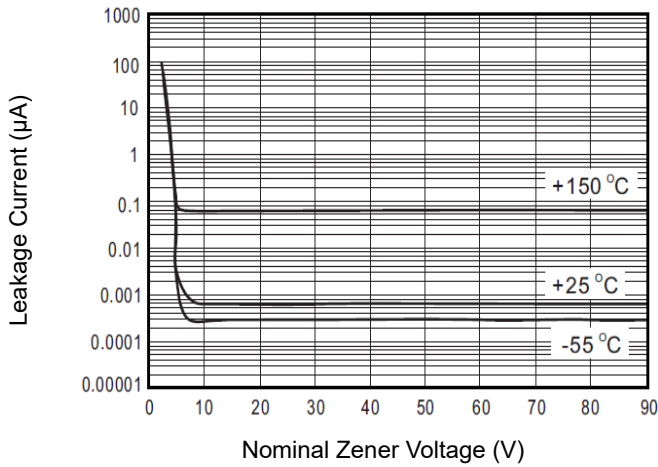
Temperature Coefficient



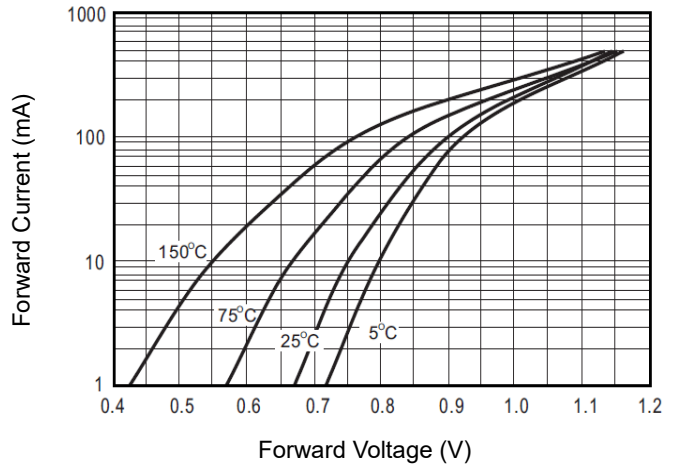
Temperature Coefficient



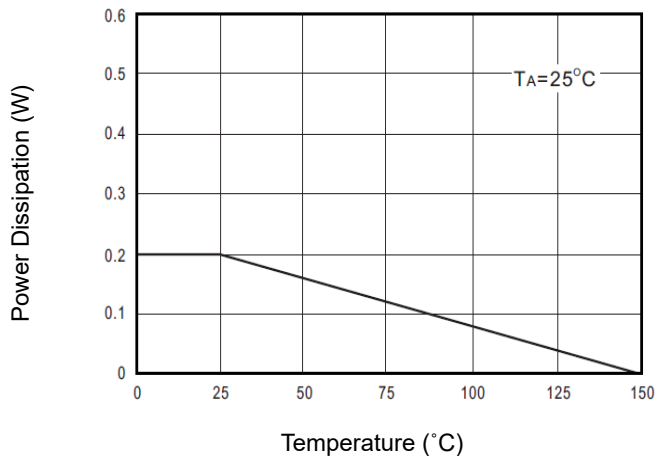
Typical Leakage Current



Typical Forward Characteristics



Steady-State Power Derating



*Specifications subject to change without notice.