

Zener Diodes MELF, LL41

ZM47-A Series

MERITEK

FEATURE

- Zener Voltage Range: 3.3V to 56V
- Zener Voltage Tolerance: $\pm 5\%$
- Power Dissipation: 1W
- External Surfaces Are Corrosion Resistant
- Application: Power Management Systems, Voltage Regulation



APPLICATION

- Case: MELF, LL41, Hermetical Sealed Glass Molded
- Polarity: Cathode Indicated By Band



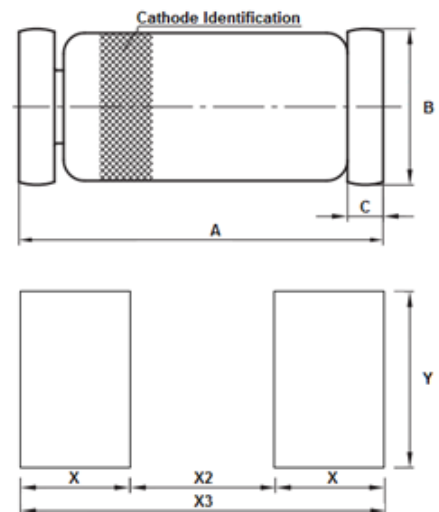
MAXIMUM RATINGS

Parameter	Symbols	Value	Unit
Power Dissipation	P_D	1	W
Forward Voltage at $I_F=200\text{mA}$	V_F	1.2	V
Resistance Junction to Ambient	$R_{\theta JA}$	170	$^{\circ}\text{C/W}$
Junction Temperature Range	T_J	-65~+175	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-65~+175	$^{\circ}\text{C}$

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

DIMENSIONS AND RECOMMENDED LAND PATTERN

LL41	Min (mm)	Max (mm)
A	4.80	5.20
B	2.35	2.65
C	--	0.40
X	--	1.5 ref
X2	--	4.0 ref
X3	--	6.3 ref
Y	--	2.7 ref



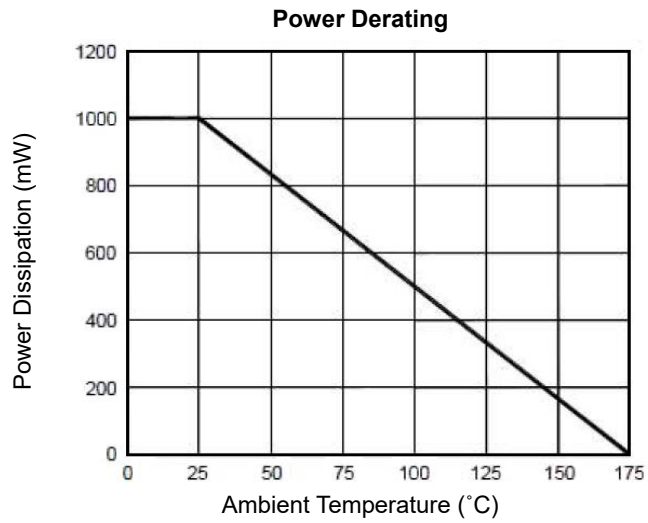
ELECTRICAL CHARACTERISTICS

Part Number	Nominal Zener Voltage		Max Zener Impedance			Max Reverse Leakage Current	
	V_Z at I_{ZT}	I_{ZT}	Z_{ZT} at I_{ZT}	Z_{ZK} at I_{ZK}	I_{ZK}	I_R at V_R	
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μ A)	(V)
ZM4728A	3.3	76	10	400	1.00	150	1.0
ZM4729A	3.6	69	10	400	1.00	100	1.0
ZM4730A	3.9	64	9.0	400	1.00	100	1.0
ZM4731A	4.3	58	9.0	400	1.00	50	1.0
ZM4732A	4.7	53	8.0	500	1.00	10	1.0
ZM4733A	5.1	49	7.0	550	1.00	10	1.0
ZM4734A	5.6	45	5.0	600	1.00	10	2.0
ZM4735A	6.2	41	2.0	700	1.00	10	3.0
ZM4736A	6.8	37	3.5	700	1.00	10	4.0
ZM4737A	7.5	34	4.0	700	0.50	10	5.0
ZM4738A	8.2	31	4.5	700	0.50	10	6.0
ZM4739A	9.1	28	5.0	700	0.50	10	7.0
ZM4740A	10	25	7.0	700	0.25	10	7.6
ZM4741A	11	23	8.0	700	0.25	5.0	8.4
ZM4742A	12	21	9.0	700	0.25	5.0	9.1
ZM4743A	13	19.0	10	700	0.25	5.0	9.9
ZM4744A	15	17.0	14	700	0.25	5.0	11.4
ZM4745A	16	15.5	16	700	0.25	5.0	12.2
ZM4746A	18	14.0	20	750	0.25	5.0	13.7
ZM4747A	20	12.5	22	750	0.25	5.0	15.2
ZM4748A	22	11.5	23	750	0.25	5.0	16.7
ZM4749A	24	10.5	25	750	0.25	5.0	18.2
ZM4750A	27	9.5	35	750	0.25	5.0	20.6
ZM4751A	30	8.5	40	1000	0.25	5.0	22.8
ZM4752A	33	7.5	45	1000	0.25	5.0	25.1
ZM4753A	36	7.0	50	1000	0.25	5.0	27.4
ZM4754A	39	6.5	60	1000	0.25	5.0	29.7
ZM4755A	43	6.0	70	1500	0.25	5.0	32.7
ZM4756A	47	5.5	80	1500	0.25	5.0	35.8
ZM4757A	51	5.0	95	1500	0.25	5.0	38.8
ZM4758A	56	4.5	110	2000	0.25	5.0	42.6

Note:

1. $T_A = 25^\circ\text{C}$ unless otherwise noted
2. The device numbers listed have a standard tolerance on the nominal Zener voltage of $\pm 5\%$.
3. The Zener Impedance is derived from 60Hz ac voltage, which have an rms value equal to 10% of the dc Zener current (I_{ZT} or I_{ZK}) superimposed on I_{ZT} or I_{ZK}

CHARACTERISTIC CURVES



*Specifications subject to change without notice.