

Zener Diodes Mini-MELF, LL34

LLZ Series

MERITEK

FEATURE

- Zener Voltage Range: 2.0V to 75V
- Zener Voltage Tolerance: $\pm 5\%$
- Power Dissipation: 500mW
- External Surfaces Are Corrosion Resistant
- Application: Power Management Systems, Voltage Regulation
- Terminals Are Readily Soldeable



MECHANICAL DATA

- Case: Mini-MELF,LL34, Hermetical Sealed Glass Molded
- Polarity; Cathode Indicated by Band



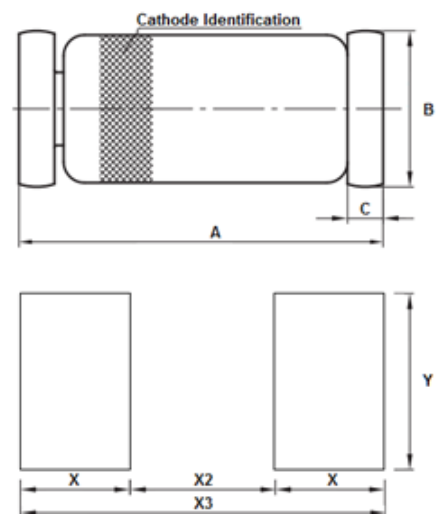
MAXIMUM RATINGS

Parameter	Symbols	Value	Unit
Power Dissipation	P_D	500	mW
Forward Voltage at $I_F=200\text{mA}$	V_F	1.2	V
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

LL34	Min (mm)	Max (mm)
A	3.3	3.7
B	1.4	1.6
C	0.35	0.5
X	1.37	1.37
X2	2.34	2.34
X3	5.08	5.08
Y	1.62	1.62



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ELECTRICAL CHARACTERISTICS

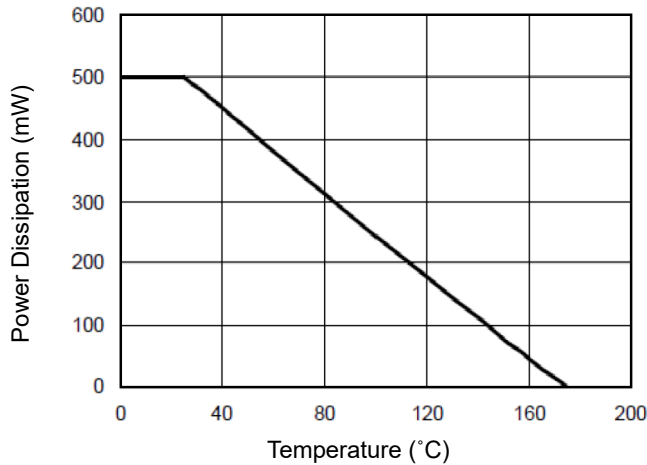
Part Number	Nominal Zener Voltage		Max Zener Impedance	Max Reverse Leakage Current	
	V_Z at I_{ZT}	I_{ZT}	Z_{ZT} at I_{ZT}	I_R at V_R	
	(V)	(mA)	(Ω)	(μ A)	(V)
LLZ2V0	2.0	5.0	100	120	0.5
LLZ2V2	2.2	5.0	100	120	0.7
LLZ2V4	2.4	5.0	100	120	1.0
LLZ2V7	2.7	5.0	110	100	1.0
LLZ3V0	3.0	5.0	120	50	1.0
LLZ3V3	3.3	5.0	120	20	1.0
LLZ3V6	3.6	5.0	100	10	1.0
LLZ3V9	3.9	5.0	100	5.0	1.0
LLZ4V3	4.3	5.0	100	5.0	1.0
LLZ4V7	4.7	5.0	80	5.0	1.0
LLZ5V1	5.1	5.0	80	5.0	1.5
LLZ5V6	5.6	5.0	60	5.0	2.5
LLZ6V2	6.2	5.0	60	5.0	3.0
LLZ6V8	6.8	5.0	20	2.0	3.5
LLZ7V5	7.5	5.0	20	0.5	4.0
LLZ8V2	8.2	5.0	20	0.5	5.0
LLZ9V1	9.1	5.0	25	0.5	6.0
LLZ10V	10	5.0	30	0.2	7.0
LLZ11V	11	5.0	30	0.2	8.0
LLZ12V	12	5.0	30	0.2	9.0
LLZ13V	13	5.0	35	0.2	10
LLZ15V	15	5.0	40	0.2	11
LLZ16V	16	5.0	40	0.2	12
LLZ18V	18	5.0	45	0.2	13
LLZ20V	20	5.0	45	0.2	15
LLZ22V	22	5.0	30	0.2	17
LLZ24V	24	5.0	35	0.2	19
LLZ27V	27	2.0	45	0.2	21
LLZ30V	30	2.0	55	0.2	23
LLZ33V	33	2.0	65	0.2	25
LLZ36V	36	2.0	75	0.2	27
LLZ39V	39	2.0	85	0.2	30
LLZ43V	43	2.0	90	0.2	33
LLZ47V	47	2.0	90	0.2	36
LLZ51V	51	2.0	110	0.2	39
LLZ56V	56	2.0	110	0.2	43
LLZ62V	62	2.0	201	0.2	47
LLZ68V	68	2.0	230	0.2	51
LLZ75V	75	2.0	240	0.2	56

Note:

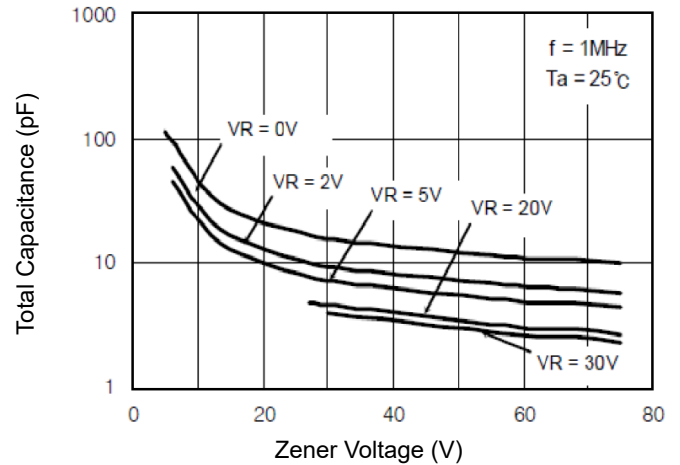
1. $T_A = 25^\circ\text{C}$ unless otherwise noted
2. The type number listed have a standard tolerance on the nominal Zener voltage of $\pm 5\%$.
3. The Zener Impedance is derived from 60Hz ac voltage, which have an rms value equal to 10% of the dc Zener current (I_{ZT} or I_{ZK}) superimposed on I_{ZT}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

CHARACTERISTIC CURVES

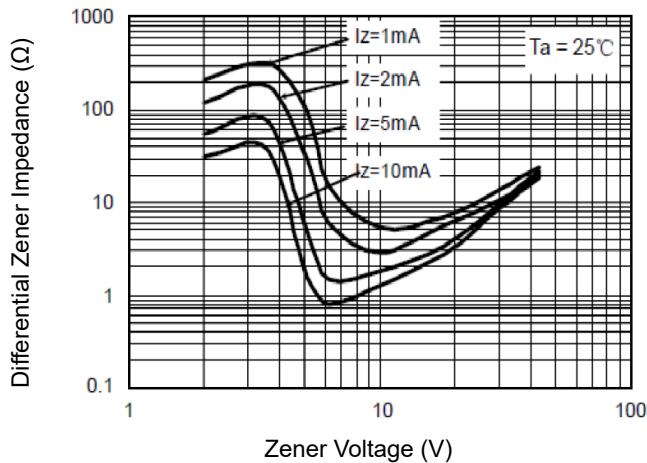
Power Derating



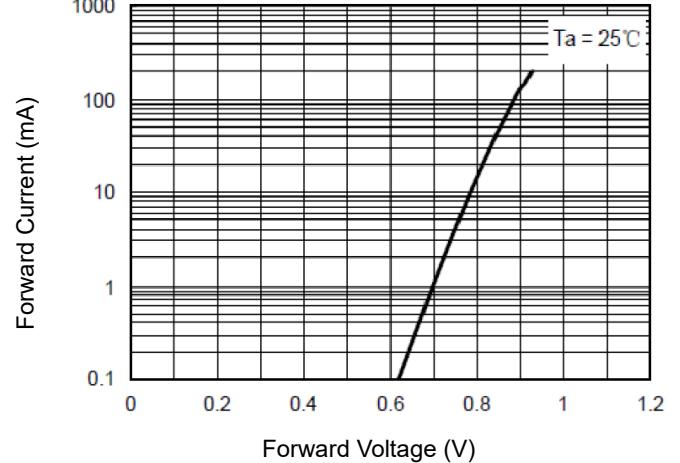
Total Capacitance



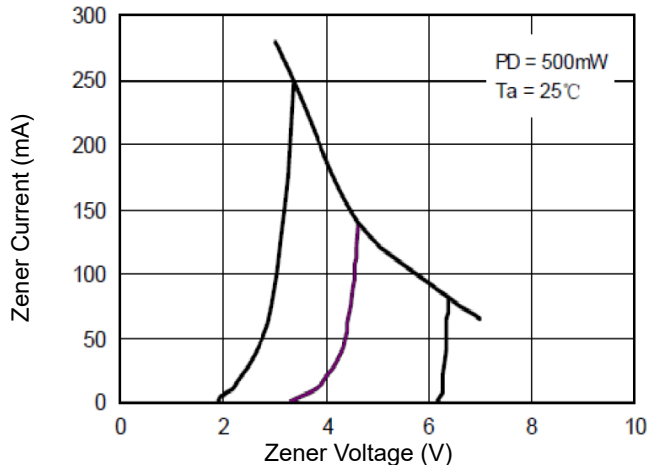
Differential Impedance vs Zener Voltage



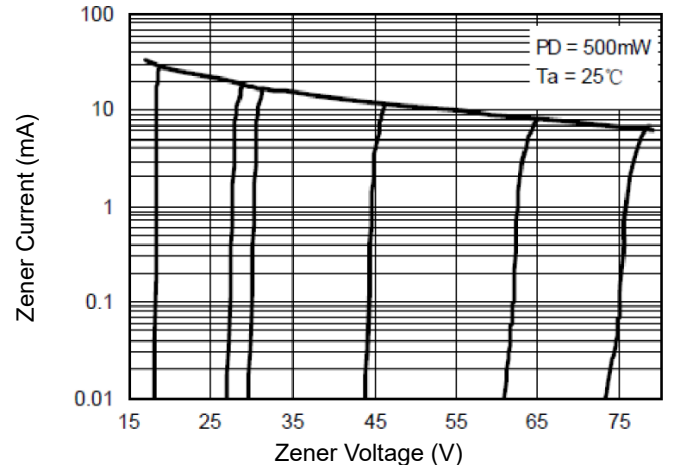
Typical Forward Characteristics



Reverse Current vs Reverse Voltage



Reverse Current vs Reverse Voltage



*Specifications subject to change without notice.