



Zener diode

Features

- 1. High reliability
- 2. Very sharp reverse characteristic
- 3. Low reverse current level
- 4. V_Z -tolerance $\pm 5\%$



Applications

Voltage stabilization

Absolute Maximum Ratings

$T_j=25\text{ }^\circ\text{C}$

Parameter	Test Conditions	Type	Symbol	Value	Unit
Power dissipation	$T_{amb} \leq 75^\circ\text{C}$		P_V	500	mW
Z-current			I_Z	P_V/V_Z	mA
Junction temperature			T_j	200	$^\circ\text{C}$
Storage temperature range			T_{stg}	-65~+200	$^\circ\text{C}$

Stresses exceeding maximum ratings may damage the device. Maximum ratings are stress ratings only. Functional operation above the recommended operating conditions is not implied. Extended exposure to stresses above the recommended operating conditions may affect device reliability.

Electrical Characteristics

$T_j=25\text{ }^\circ\text{C}$

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=200\text{mA}$		V_F			1.1	V



Type	$V_{Znom}^{1)}$	I_{ZT} for	r_{zT}	r_{zK} at	I_{ZK}	I_R at	V_R	TK_{VZ}
	V	mA	Ω	Ω	mA	μA	V	%/K
DL5221B	2.4	20	<30	<1200	0.25	<100	1.0	<-0.085
DL5222B	2.5	20	<30	<1250	0.25	<100	1.0	<-0.085
DL5223B	2.7	20	<30	<1300	0.25	<75	1.0	<-0.080
DL5224B	2.8	20	<30	<1400	0.25	<75	1.0	<-0.080
DL5225B	3.0	20	<29	<1600	0.25	<50	1.0	<-0.075
DL5226B	3.3	20	<28	<1600	0.25	<25	1.0	<-0.070
DL5227B	3.6	20	<24	<1700	0.25	<15	1.0	<-0.065
DL5228B	3.9	20	<23	<1900	0.25	<10	1.0	<-0.060
DL5229B	4.3	20	<22	<2000	0.25	<5	1.0	<+0.055
DL5230B	4.7	20	<19	<1900	0.25	<5	2.0	<+0.030
DL5231B	5.1	20	<17	<1600	0.25	<5	2.0	<+0.030
DL5232B	5.6	20	<11	<1600	0.25	<5	3.0	<+0.038
DL5233B	6.0	20	<7	<1600	0.25	<5	3.5	<+0.038
DL5234B	6.2	20	<7	<1000	0.25	<5	4.0	<+0.045
DL5235B	6.8	20	<5	<750	0.25	<3	5.0	<+0.050
DL5236B	7.5	20	<6	<500	0.25	<3	6.0	<+0.058
DL5237B	8.2	20	<8	<500	0.25	<3	6.5	<+0.062
DL5238B	8.7	20	<8	<600	0.25	<3	6.5	<+0.065
DL5239B	9.1	20	<10	<600	0.25	<3	7.0	<+0.068
DL5240B	10	20	<17	<600	0.25	<3	8.0	<+0.075
DL5241B	11	20	<22	<600	0.25	<2	8.4	<+0.076
DL5242B	12	20	<30	<600	0.25	<1	9.1	<+0.077
DL5243B	13	9.5	<13	<600	0.25	<0.5	9.9	<+0.079
DL5244B	14	9.0	<15	<600	0.25	<0.1	10	<+0.082
DL5245B	15	8.5	<16	<600	0.25	<0.1	11	<+0.082
DL5246B	16	7.8	<17	<600	0.25	<0.1	12	<+0.083
DL5247B	17	7.4	<19	<600	0.25	<0.1	13	<+0.084
DL5248B	18	7.0	<21	<600	0.25	<0.1	14	<+0.085
DL5249B	19	6.6	<23	<600	0.25	<0.1	15	<+0.086
DL5250B	20	6.2	<25	<600	0.25	<0.1	16	<+0.086
DL5251B	22	5.6	<29	<600	0.25	<0.1	17	<+0.087
DL5252B	24	5.2	<33	<600	0.25	<0.1	18	<+0.088
DL5253B	25	5.0	<35	<600	0.25	<0.1	19	<+0.089
DL5254B	27	4.6	<41	<600	0.25	<0.1	21	<+0.090
DL5255B	28	4.5	<44	<600	0.25	<0.1	21	<+0.091
DL5256B	30	4.2	<49	<600	0.25	<0.1	23	<+0.091
DL5257B	33	3.8	<58	<700	0.25	<0.1	25	<+0.092
DL5258B	36	3.4	<70	<700	0.25	<0.1	27	<+0.093
DL5259B	39	3.2	<80	<800	0.25	<0.1	30	<+0.094
DL5260B	43	3.0	<93	<900	0.25	<0.1	33	<+0.095
DL5261B	47	2.7	<105	<1000	0.25	<0.1	36	<+0.095
DL5262B	51	2.5	<125	<1100	0.25	<0.1	39	<+0.096
DL5263B	56	2.2	<150	<1300	0.25	<0.1	43	<+0.096
DL5264B	60	2.1	<170	<1400	0.25	<0.1	46	<+0.097
DL5265B	62	2.0	<185	<1400	0.25	<0.1	47	<+0.097
DL5266B	68	1.8	<230	<1600	0.25	<0.1	52	<+0.097
DL5267B	75	1.7	<270	<1700	0.25	<0.1	58	<+0.098
DL5268B	82	1.5	<330	<2000	0.25	<0.1	62	<+0.098
DL5269B	87	1.4	<370	<2200	0.25	<0.1	68	<+0.099
DL5270B	91	1.4	<400	<2300	0.25	<0.1	69	<+0.099
DL5271B	100	1.3	<500	<2600	0.25	<0.1	76	<+0.11

1) Based on DC-measurement at thermal equilibrium while maintaining the lead temperature(T_L) at 30°C, 9.5mm (3/8") from the diode body.



Characteristics ($T_j=25$

$^{\circ}\text{C}$ unless otherwise specified)

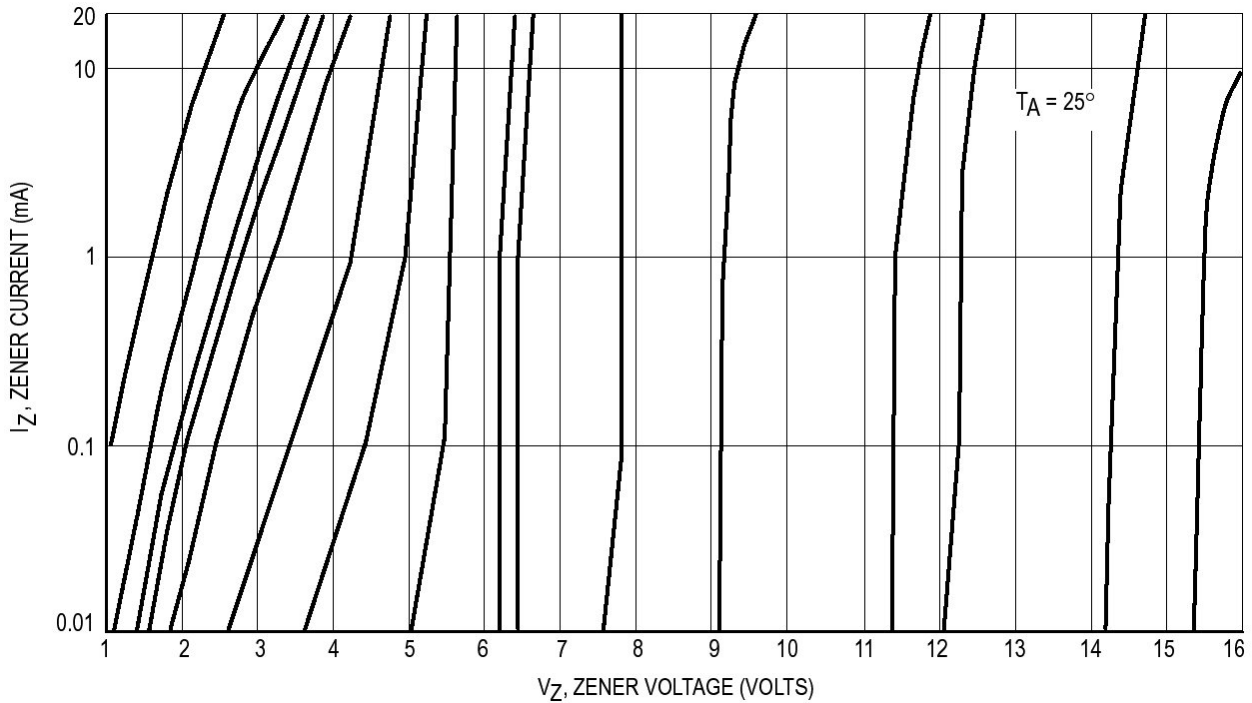


Figure 1. Zener Voltage versus Zener Current – $V_Z=1$ thru 16 Volts

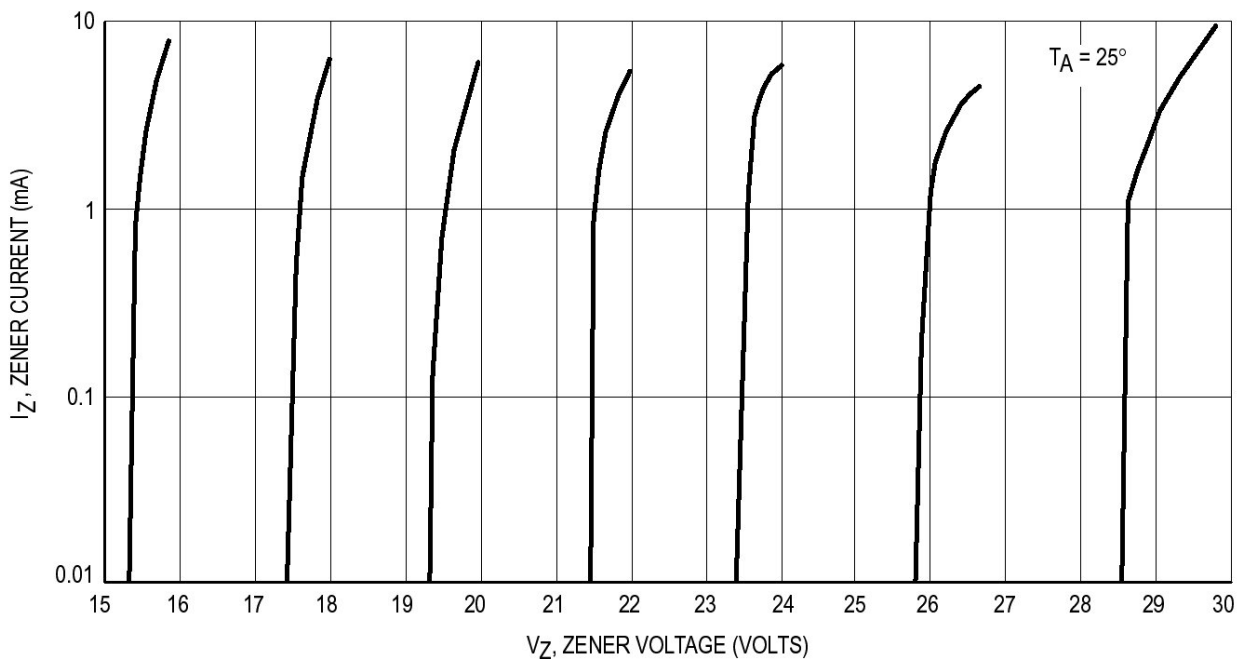


Figure 2. Zener Voltage versus Zener Current – $V_Z=15$ thru 30 Volts

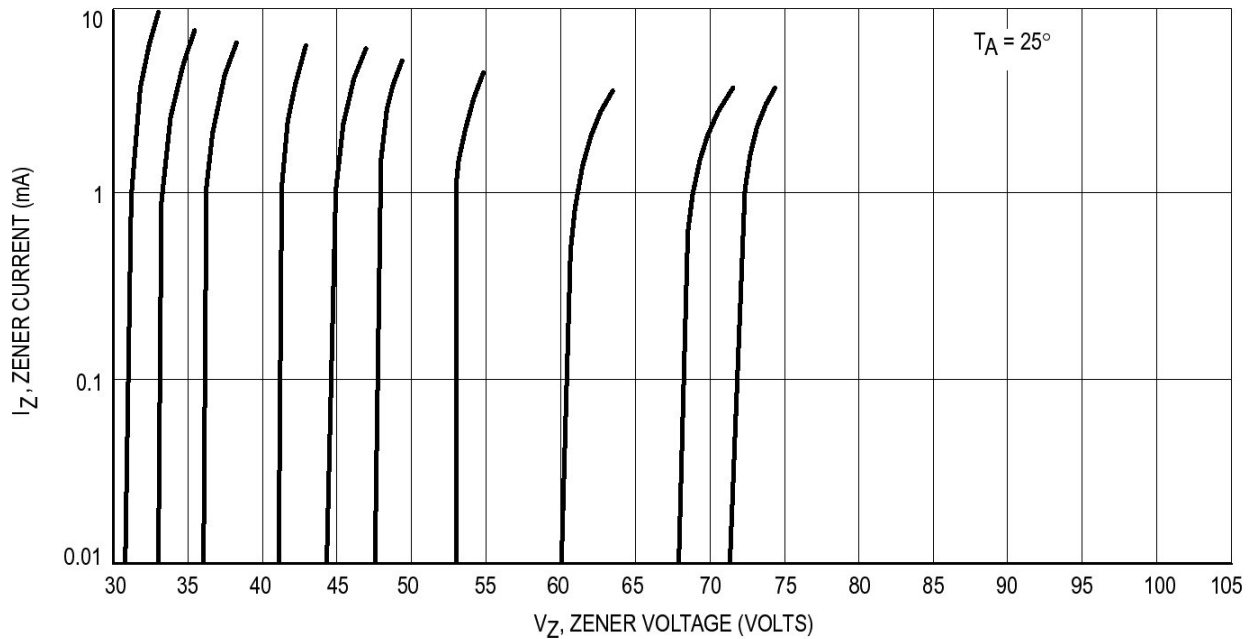
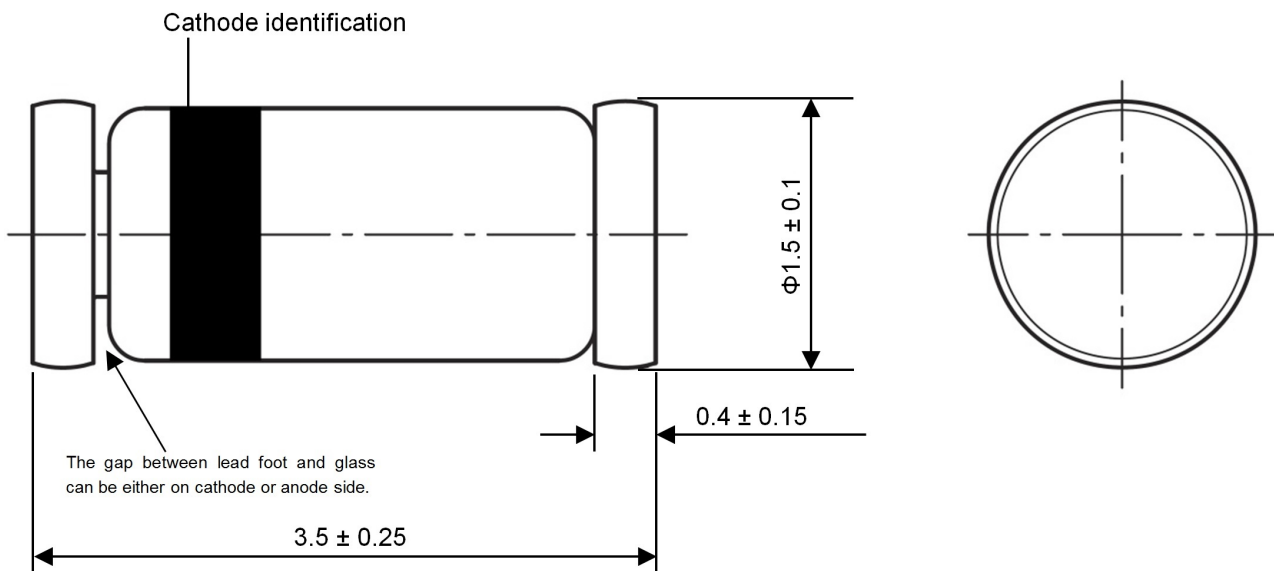


Figure 3. Zener Voltage versus Zener Current – $V_Z=30$ thru 75 Volts

Dimensions in mm



Glass Case
Mini Melf / SOD-80
JEDEC DO-213 AA

Excel Semiconductor