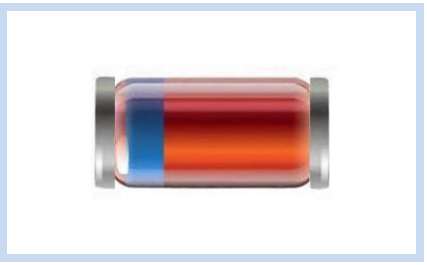
Zener Diodes
1W MELF LL41

DL47xx Series

MERITEK

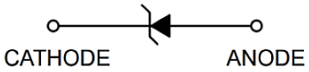
FEATURES



- Zener Voltage Range: 3.3V to 75V
- Zener Voltage Tolerance: ±5%
- Operating junction temperature range: -65°C to +200°C
- Glass-Sealed Construction Enhances Environmental and Mechanical Reliability
- Wide Temperature Capability Allows Use in Demanding Industrial Environments

APPLICATIONS

- Voltage Regulation, Voltage Reference Generation, and Overvoltage Protection Circuits.
- Industrial Automation, Power Management Systems, Consumer Electronics, Telecommunications Infrastructure, and Automotive



RoHS

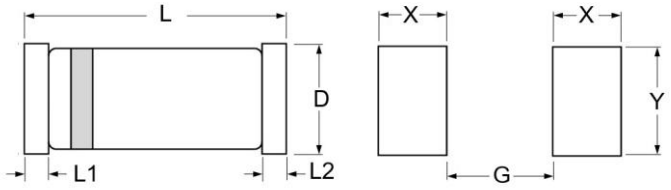
ABSOLUTE MAXIMUM RATINGS

Parameter	Symbols	Value	Unit
Power Dissipation at T_A =25°C	P_D	1	W
Maximum Forward Voltage at I_F=200mA	V_F	1.2	V
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	170	˚C/W
Operating Junction Temperature Range	T_J	-65 ~ +200	˚C
Storage Temperature Range	T_{STG}	-65 ~ +200	˚C

DIMENSIONS

Item	Min (mm)	Max (mm)
L	5.10	5.50
D	2.60	2.90
L1, L2	0.30	0.50
X	2.00	
Y	3.00	
G	3.30	

Note: Color band denotes cathode end

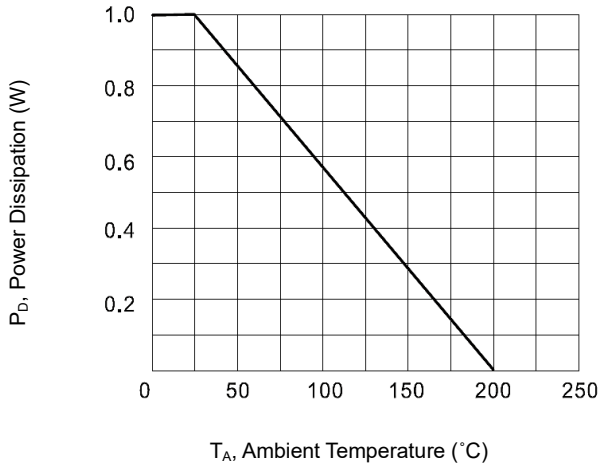


ELECTRICAL CHARACTERISTICS

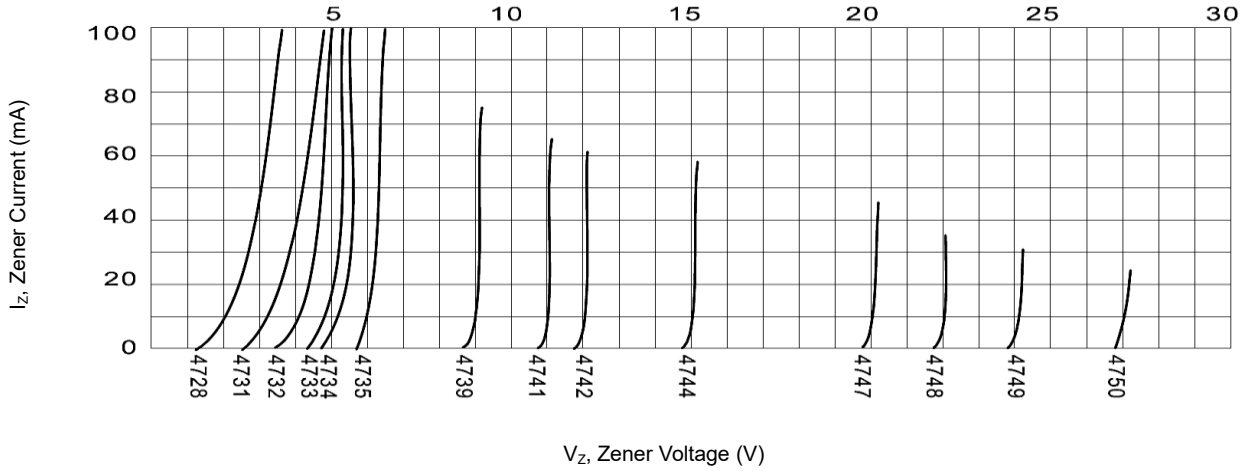
Part Number	Nominal Zener Voltage			Max Zener Impedance				Max Reverse Leakage Current	
	V_Z at I_{ZT}			Z_{ZT} at I_{ZT}	I_{ZT}	Z_{ZK} at I_{ZK}	I_{ZK}	I_R at V_R	
	Nom (V)	Min (V)	Max (V)	(Ω)	(mA)	(Ω)	(mA)	(μA)	(V)
DL4728A	3.3	3.14	3.47	10	76	400	1	100	1
DL4729A	3.6	3.42	3.78	10	69	400	1	100	1
DL4730A	3.9	3.71	4.10	9	64	400	1	50	1
DL4731A	4.3	4.09	4.52	9	58	400	1	10	1
DL4732A	4.7	4.47	4.94	8	53	500	1	10	1
DL4733A	5.1	4.85	5.36	7	49	550	1	10	1
DL4734A	5.6	5.32	5.88	5	45	600	1	10	2
DL4735A	6.2	5.89	6.51	2	41	700	1	10	3
DL4736A	6.8	6.46	7.14	3.5	37	700	1	10	4
DL4737A	7.5	7.13	7.88	4	34	700	0.5	10	5
DL4738A	8.2	7.79	8.61	4.5	31	700	0.5	10	6
DL4739A	9.1	8.65	9.56	5	28	700	0.5	10	7
DL4740A	10	9.50	10.50	7	25	700	0.25	10	7.6
DL4741A	11	10.45	11.55	8	23	700	0.25	5	8.4
DL4742A	12	11.40	12.60	9	21	700	0.25	5	9.1
DL4743A	13	12.35	13.65	10	19	700	0.25	5	9.9
DL4744A	15	14.25	15.75	14	17	700	0.25	5	11.4
DL4745A	16	15.20	16.80	16	15.5	700	0.25	5	12.2
DL4746A	18	17.10	18.90	20	14.0	750	0.25	5	13.7
DL4747A	20	19.00	21.00	22	12.5	750	0.25	5	15.2
DL4748A	22	20.90	23.10	23	11.5	750	0.25	5	16.7
DL4749A	24	22.80	25.20	25	10.5	750	0.25	5	18.2
DL4750A	27	25.65	28.35	35	9.5	750	0.25	5	20.6
DL4751A	30	28.50	31.50	40	8.5	1000	0.25	5	22.8
DL4752A	33	31.35	34.65	45	7.5	1000	0.25	5	25.1
DL4753A	36	34.20	37.80	50	7.0	1000	0.25	5	27.4
DL4754A	39	37.05	40.95	60	6.5	1000	0.25	5	29.7
DL4755A	43	40.85	45.15	70	6.0	1500	0.25	0.5	32.7
DL4756A	47	44.65	49.35	80	5.5	1500	0.25	0.5	35.8
DL4757A	51	48.45	53.55	95	5.0	1500	0.25	0.5	38.8
DL4758A	56	53.20	58.80	110	4.5	2000	0.25	0.5	42.6
DL4759A	62	58.90	65.10	125	4.0	2000	0.25	0.5	47.1
DL4760A	68	64.60	71.40	150	3.7	2000	0.25	0.5	51.7
DL4761A	75	71.25	78.75	175	3.3	2000	0.25	0.5	56.0

CHARACTERISTIC CURVES

Power Derating Curve



Typical Zener Breakdown Characteristics



*Specifications subject to change without notice.