

DL4728A THRU DL4764A

1W SURFACE MOUNT
ZENER DIODES

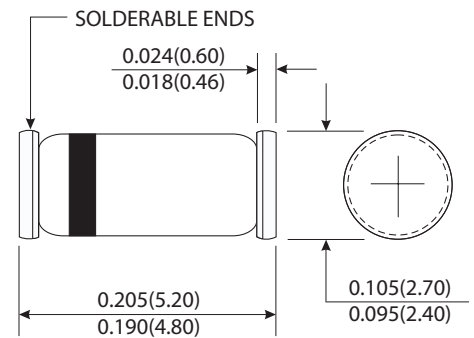
Features

- 1.0W Power Dissipation
- 3.9V - 100V Nominal Zener Voltages
- Standard V_z Tolerance is 5%

Mechanical Data

- Case : MELF(DO-41) glass
- Terminals : Solderable per MIL-STD-202, method 208
- Polarity : Cathode band
- Approx. Weight : 0.25 grams

MELF (DO-41)



Dimensions in inches and (millimeters)

Absolute Maximum Ratings (Limiting Values) ($T_A=25^\circ\text{C}$)

	Symbols	Value	Units
Zener current see table "Characteristics"	I_z	P_d/V_z	mA
Power dissipation at $T_A=25^\circ\text{C}$ (Note 1)	P_d	1	W
Thermal resistance - Junction to ambient air (Note 1)	$R_{\theta JA}$	170	K/W
Forward voltage at $I_F=200\text{ mA}$	V_F	1.2	V
Operating & storage temperature range	T_J, T_{STG}	-65 to +200	$^\circ\text{C}$

Notes :

- (1) Valid provided that electrodes of the case are kept at ambient temperature.
- (2) Measured under thermal equilibrium and DC (I_{ZT}) test conditions.
- (3) The Zener impedance is derived from the 60Hz AC voltage which results when an AC current having an RMS value equal to 10% of the Zener current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK} . Zener impedance is measured at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units.



ELECTRICAL CHARACTERISTIC at (TA=25 °C unless other specified)

Type Number	Nominal Zener Voltage (2)	Test Current	Maximum Zener Impedance (3)			Maximum Reverse Leakage Current	Max Surge Current 8.3ms	Maximum Zener Current	
	V _Z @ I _{ZT}	I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	I _R	@ V _R	I _{ZS}	I _{ZM}
	V	m	Ω	Ω	mA	μA	V	mA	mA
DL4728A	3.3	76	10	400	1.0	100	1.0	1380	276
DL4729A	3.6	69	10	400	1.0	100	1.0	1260	252
DL4730A	3.9	64	9.0	400	1.0	50	1.0	1190	234
DL4731A	4.3	58	9.0	400	1.0	10	1.0	1070	217
DL4732A	4.7	53	8.0	500	1.0	10	1.0	970	193
DL4733A	5.1	49	7.0	550	1.0	10	1.0	890	178
DL4734A	5.6	45	5.0	600	1.0	10	2.0	810	162
DL4735A	6.2	41	2.0	700	1.0	10	3.0	730	146
DL4736A	6.8	37	3.5	700	1.0	10	4.0	660	133
DL4737A	7.5	34	4.0	700	0.5	10	5.0	605	121
DL4738A	8.2	31	4.5	700	0.5	10	6.0	550	110
DL4739A	9.1	28	5.0	700	0.5	10	7.0	500	100
DL4740A	10	25	7.0	700	0.25	10	7.6	454	91
DL4741A	11	23	8.0	700	0.25	5.0	8.4	414	83
DL4742A	12	21	9.0	700	0.25	5.0	9.1	380	76
DL4743A	13	19	10	700	0.25	5.0	9.9	344	69
DL4744A	15	17	14	700	0.25	5.0	11.4	304	61
DL4745A	16	15.5	16	700	0.25	5.0	12.2	285	57
DL4746A	18	14	20	750	0.25	5.0	13.7	250	50
DL4747A	20	12.5	22	750	0.25	5.0	15.2	225	45
DL4748A	22	11.5	23	750	0.25	5.0	16.7	205	41
DL4749A	24	10.5	25	750	0.25	5.0	18.2	190	38
DL4750A	27	9.5	35	750	0.25	5.0	20.6	170	34
DL4751A	30	8.5	40	1000	0.25	5.0	22.8	150	30
DL4752A	33	7.5	45	1000	0.25	5.0	25.1	135	27
DL4753A	36	7.0	50	1000	0.25	5.0	27.4	125	25
DL4754A	39	6.5	60	1000	0.25	5.0	29.7	115	23
DL4755A	43	6.0	70	1500	0.25	5.0	32.7	110	22
DL4756A	47	5.5	80	1500	0.25	5.0	35.8	95	19
DL4757A	51	5.0	95	1500	0.25	5.0	38.8	90	18
DL4758A	56	4.5	110	2000	0.25	5.0	42.6	80	16
DL4759A	62	4.0	125	2000	0.25	5.0	47.1	70	14
DL4760A	68	3.7	150	2000	0.25	5.0	51.7	65	13
DL4761A	75	3.3	175	2000	0.25	5.0	56.0	60	12
DL4762A	82	3.0	200	3000	0.25	5.0	62.2	55	11
DL4763A	91	2.8	250	3000	0.25	5.0	69.2	50	10
DL4764A	100	2.5	350	3000	0.25	5.0	76.0	45	9.0

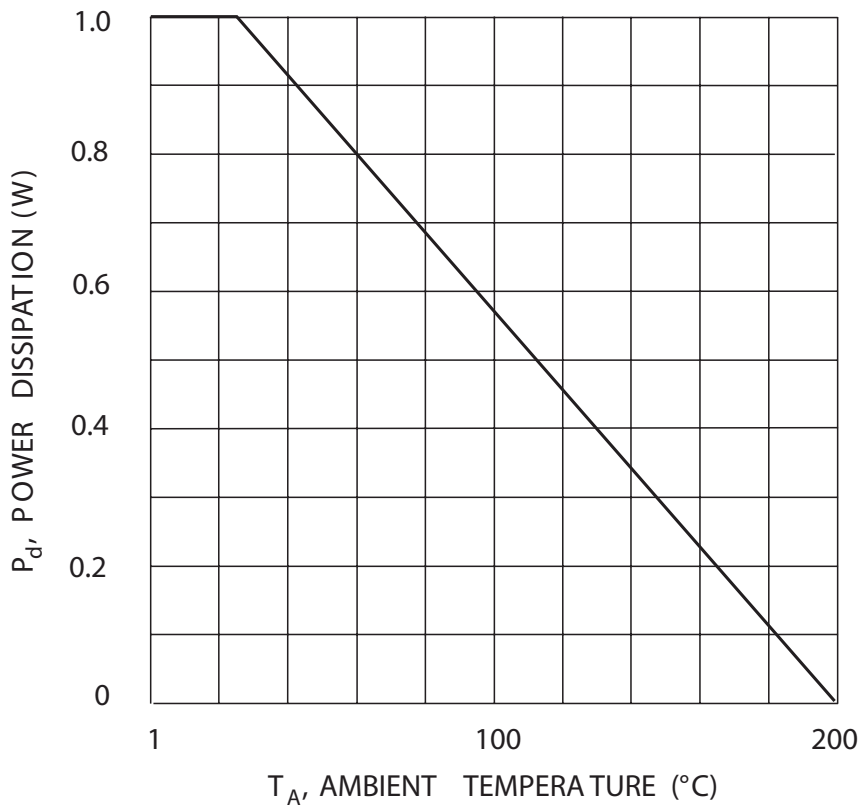


Fig. 1, Power Derating Curve