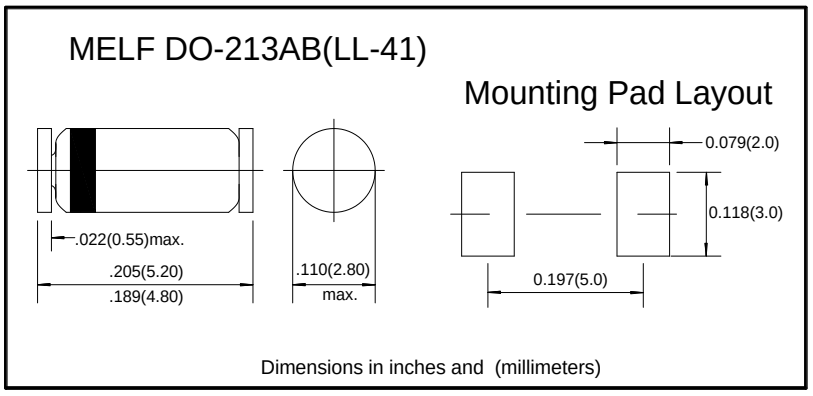
Zener Diodes



Features

- P_{tot} 1.0W
- V_z 3.3V-100V
- V_z –tolerance: ±5%

Applications

- Stabilizing Voltage

■Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	Max
Power dissipation	P_{tot}	W	L=4mm,T_L=25℃	1.0[1)]
Zener current	I_z	mA		P_V /V_Z
Maximum junction temperature	T_j	℃		175
Storage temperature range	T_{stg}	℃		-65 to +175

■Electrical Characteristics (T_a=25℃ Unless otherwise specified)

Item	Symbol	Unit	Conditions	Max
Thermal resistance	$R_{\theta JA}$	℃/W	junction to ambient air, L=4mm,T_L=constant	170
Forward Voltage	VF	V	IF = 200mA	1.2

Notes:

Valid provided that electrodes are kept at ambient temperature.

■Electrical Characteristics (T_A=25℃ unless otherwise noted)

Part Number	Nominal Zener voltage[1]	Test current	Maximum dynamic impedance			Maximum reverse leakage current		Surge current[3]	Maximum regulator current[2]
	V_Z at I_{ZT}	I_{ZT}	Z_{ZT} at I_{ZT}	Z_{ZK} at I_{ZK}	I_{ZK}	IR	Test voltage V_R	at T_A=25℃ I_R	I_{ZM}
	V	mA	Ω	Ω	mA	μA	V	mA	mA
DL4728A	3.3	76	10	400	1	100	1	1380	276
DL4729A	3.6	69	10	400	1	100	1	1260	252
DL4730A	3.9	64	9	400	1	50	1	1190	234
DL4731A	4.3	58	9	400	1	10	1	1070	217
DL4732A	4.7	53	8	500	1	10	1	970	193
DL4733A	5.1	49	7	550	1	10	1	890	178
DL4734A	5.6	45	5	600	1	10	2	810	162
DL4735A	6.2	41	2	700	1	10	3	730	146
DL4736A	6.8	37	3.5	700	1	10	4	660	133
DL4737A	7.5	34	4	700	0.5	10	5	605	121
DL4738A	8.2	31	4.5	700	0.5	10	6	550	110
DL4739A	9.1	28	5	700	0.5	10	7	500	100
DL4740A	10	25	7	700	0.25	10	7.6	454	91
DL4741A	11	23	8	700	0.25	5	8.4	414	83
DL4742A	12	21	9	700	0.25	5	9.1	380	76
DL4743A	13	19	10	700	0.25	5	9.9	344	69
DL4744A	15	17	14	700	0.25	5	11.4	304	61
DL4745A	16	15.5	16	700	0.25	5	12.2	285	57
DL4746A	18	14	20	750	0.25	5	13.7	250	50
DL4747A	20	12.5	22	750	0.25	5	15.2	225	45
DL4748A	22	11.5	23	750	0.25	5	16.7	205	41
DL4749A	24	10.5	25	750	0.25	5	18.2	190	38
DL4750A	27	9.5	35	750	0.25	5	20.6	170	34
DL4751A	30	8.5	40	1000	0.25	5	22.8	150	30
DL4752A	33	7.5	45	1000	0.25	5	25.1	135	27
DL4753A	36	7	50	1000	0.25	5	27.4	125	25
DL4754A	39	6.5	60	1000	0.25	5	29.7	115	23
DL4755A	43	6	70	1500	0.25	5	32.7	110	22
DL4756A	47	5.5	80	1500	0.25	5	35.8	95	19
DL4757A	51	5	95	1500	0.25	5	38.8	90	18
DL4758A	56	4.5	110	2000	0.25	5	42.6	80	16
DL4759A	62	4	125	2000	0.25	5	47.1	70	14
DL4760A	68	3.7	150	2000	0.25	5	51.7	65	13
DL4761A	75	3.3	175	2000	0.25	5	56	60	12
DL4762A	82	3	200	3000	0.25	5	62.2	55	11
DL4763A	91	2.8	250	3000	0.25	5	69.2	50	10
DL4764A	100	2.5	350	3000	0.25	5	76	45	9

Notes:

1) The zener impedance is derived from the 1 kHz AC voltage which results when an AC current having an RMS value equal to 10 % of the zener current (IZT or IZK) is superimposed on IZT or IZK. Zener impedance is measured at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units

2) Valid provided that electrodes are kept at ambient temperature

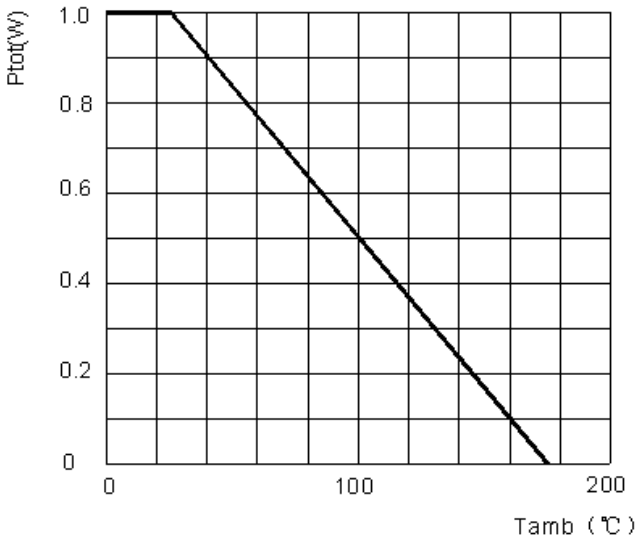
3) Measured under thermal equilibrium and DC test conditions

■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
DL47 SERIES	F1	Approximate 0.0306	5000	10000	50000	13” reel

■Characteristics (Typical)

FIG1: Admissible Power Dissipation vs. Ambient Temperat



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