ZENER DIODES

POWER DISSIPATION: 1.0 W

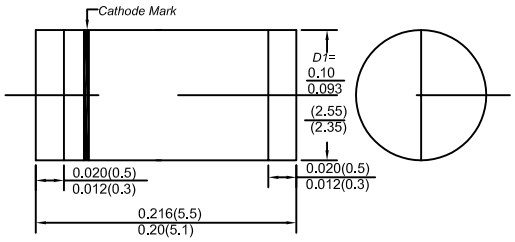
FEATURES

- ◇ Silicon planar power zener diodes
- ◇ For use in stabilizing and clipping circuits with high power rating.
- ◇ Standard zener voltage tolerance is ±10%. Add suffix "A" for ±5% tolerance. other zener voltage and tolerances are available upon request.

MECHANICAL DATA

- ◇ Case:MELF, glass case
- ◇ Terminals: solderable per MIL-STD-202, method 208
- ◇ Polarity: cathode band
- ◇ Marking: type number
- ◇ Approx. weight: 0.25 grams.

MELF



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

	SYMBOL	VALUE	UNIT
Zener current (see Table "Characteristics")			
Power dissipation @ $T_{amb} \leqslant 50$℃	P_{Diss}	1.0[1)]	W
Z-current	I_Z	P_V/V_Z	mA
Junction temperature	T_J	175[1)]	℃
Storage temperature range	T_s	-55---+175	℃
Junction ambient l=9.5mm(3/8 "), T_L=constant	R_{ThJA}	170	K/W

	SYMBOL	MIN	TYP	MAX	UNIT
Forward voltage at I_F=200mA	V_F	—	—	1.2	V

1)Valid provided that electrodes re kept at ambient temperature.

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ELECTRICAL CHARACTERISTICS (TA=25℃)

Type	Nominal zener voltage 1)	Test current	Maximum dynamic impedance			Maximum reverse leakage current		Max surge current 8.3ms	Maximum regulator current 2)
	Vz@I_{ZT}	I_{ZT}	I_{ZT}@Z_{ZT}	Z_{ZK}@I_{ZK}	I_{ZK}	I_R	@V_R	I_R@T_{amb} =25℃	I_{ZM} @T_{amb} =50℃
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)	(mA)
DL4728	3.3	76	10	400	1.0	100	1	1380	276
DL4729	3.6	69	10	400	1.0	100	1	1260	252
DL4730	3.9	64	9	400	1.0	50	1	1190	234
DL4731	4.3	58	9	400	1.0	10	1	1070	217
DL4732	4.7	53	8	500	1.0	10	1	970	193
DL4733	5.1	49	7	550	1.0	10	1	890	178
DL4734	5.6	45	5	600	1.0	10	2	810	462
DL4735	6.2	41	2	700	1.0	10	3	730	146
DL4736	6.8	37	3.5	700	1.0	10	4	660	133
DL4737	7.5	34	4.0	700	0.5	10	5	605	121
DL4738	8.2	31	4.5	700	0.5	10	6	550	110
DL4739	9.1	28	5.0	700	0.5	10	7	500	100
DL4740	10	25	7	700	0.25	10	7.6	454	91
DL4741	11	23	8	700	0.25	5	8.4	414	83
DL4742	12	21	9	700	0.25	5	9.1	380	76
DL4743	13	19	10	700	0.25	5	9.9	344	69
DL4744	15	17	14	700	0.25	5	11.4	304	61
DL4745	16	15.5	16	700	0.25	5	12.2	285	57
DL4746	18	14	20	750	0.25	5	13.7	250	50
DL4747	20	12.5	22	750	0.25	5	15.2	225	45
DL4748	22	11.5	23	750	0.25	5	16.7	205	41
DL4749	24	10.5	25	750	0.25	5	18.2	190	38
DL4750	27	9.5	35	750	0.25	5	20.6	170	34
DL4751	30	8.5	40	1000	0.25	5	22.8	150	30
DL4752	33	7.5	45	1000	0.25	5	25.1	135	27
DL4753	36	7.0	50	1000	0.25	5	27.4	125	25
DL4754	39	6.5	60	1000	0.25	5	29.7	115	23
DL4755	43	6.0	70	1500	0.25	5	32.7	110	22
DL4756	47	5.5	80	1500	0.25	5	35.8	95	19
DL4757	51	5.0	95	1500	0.25	5	38.8	90	18
DL4758	56	4.5	110	2000	0.25	5	42.6	80	16
DL4759	62	4.0	125	2000	0.25	5	47.1	70	14
DL4760	68	3.7	150	2000	0.25	5	51.7	65	13
DL4761	75	3.3	175	2000	0.25	5	56.0	60	12
DL4762	82	3.0	200	3000	0.25	5	62.2	55	11
DL4763	91	2.8	250	3000	0.25	5	69.2	50	10
DL4764	100	2.5	350	3000	0.25	5	79.0	45	9

1)Based on dc_measurement at theral equilibrium while maitaining the lead temperature (T_L) at 30℃+1℃,9.5mm(3/8")from the Diode body.

2)Valid provided that electrodes at a distance of 10 mm form case kept at ambient temperature.

*)Additionnal measurement of voltage gruup 9v1 to 75 at 95% $V_{ZMIN} \leqslant$ 35nA at T_J25℃

FIG.1 – BREAKDOWN CHARACTERISTICS

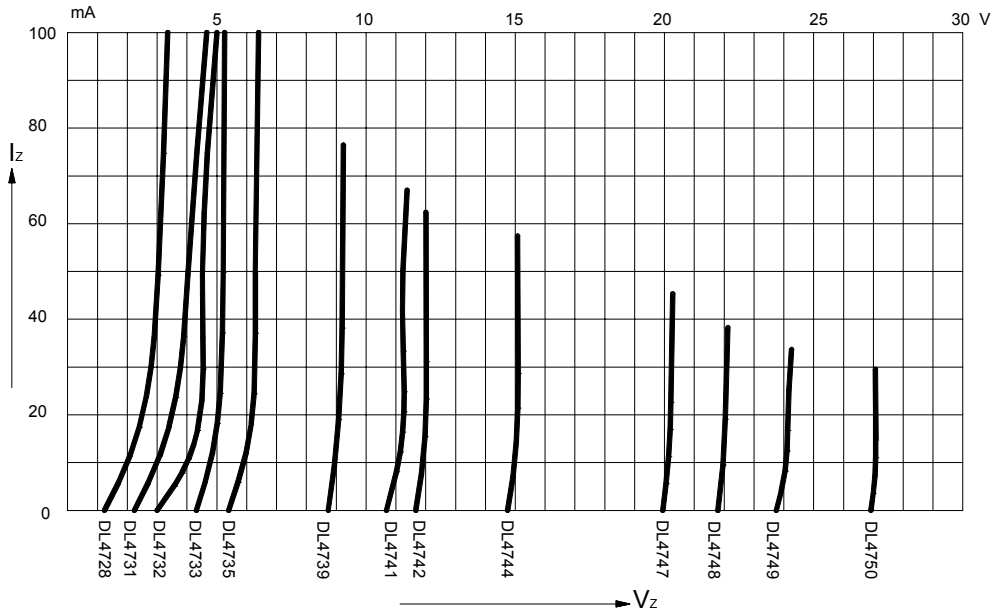

FIG.2 – ADMISSIBLE POWER DISSIPATION VERSUS AMBIENT TEMPERATURE