Micro Commercial Components
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DL4728 THRU DL4761

1 Watt Zener Diode 3.3 to 75 Volts

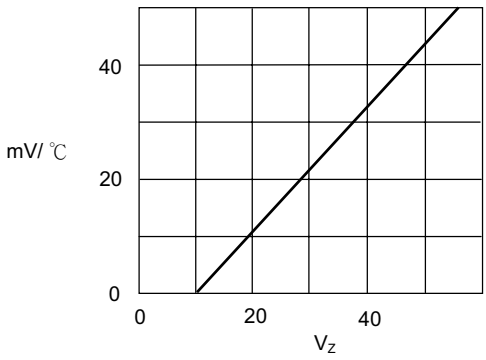
Features

- High Reliability
- Very Sharp Reverse Characteristic
- Low Reverse Current Level
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Moisture Sensitivity Level 1

Maximum Ratings

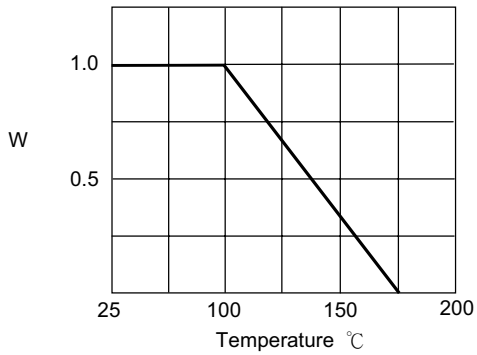
- Operating Temperature: -65 ℃ to +175 ℃
- Storage Temperature: -65 ℃ to +175 ℃
- 1 Watt DC Power Dissipation
- Maximum Thermal Resistance: 100K/W Junction To Ambient Test Conditions: I = 9.5mm(3/8"),T_L = constant
- Maximum Forward Voltage @ 200mA: 1.2 Volts

Figure 1 - Typical Temperature Coefficient



Typical Temperature Coefficient (mV/ ℃) – *versus* – Zener Voltage (V_Z)

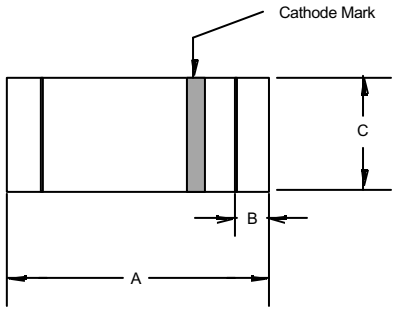
Figure 2 - Derating Curve



Power Dissipation (W) - *Versus* - Temperature ℃

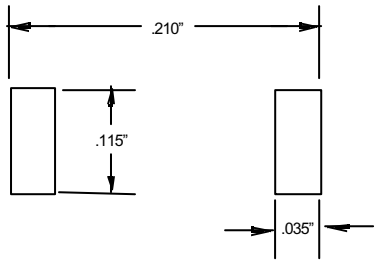
Notes: 1. Lead in Glass Exemption Applied, see EU Directive Annex Notes 5.

GLASS MELF



DIM	INCHES MIN	INCHES MAX	MM MIN	MM MAX	NOTE
A	.190	.205	4.80	5.20	
B	---	.022	---	.55	Nominal
C	.095	.105	2.40	2.67	∅

SUGGESTED SOLDER PAD LAYOUT



DL4728 thru DL4761

ELECTRICAL CHARACTERISTICS @25°C

MCC PART NUMBER	ZENER VOLTAGE V_Z VOLTS	TEST CURRENT I_{ZT} mA	MAXIMUM DYNAMIC IMPEDANCE Z_{ZT} @ I_{ZT} OHMS	MAXIMUM REVERSE CURRENT I_R @ V_R µA	TEST VOLTAGE V_R VOLTS	MAXIMUM REGULATOR CURRENT IZM TA = 50°C mA	MAXIMUM KNEE IMPEDANCE Z_{ZK} @ I_{ZK} OHMS	TEST CURRENT I_{ZK} mA	MAXIMUM SURGE CURRENT I_S mA
DL4728	3.3	76	10	100	1	276	400	1.0	1280
DL4729	3.6	69	10	100	1	252	400	1.0	1260
DL4730	3.9	64	9	50	1	234	400	1.0	1190
DL4731	4.3	58	9	10	1	217	400	1.0	1070
DL4732	4.7	53	8	10	1	193	500	1.0	970
DL4733	5.1	49	7	10	1	178	550	1.0	890
DL4734	5.6	45	5	10	2	162	600	1.0	810
DL4735	6.2	41	2	10	3	146	700	1.0	730
DL4736	6.8	37	3.5	10	4	133	700	1.0	660
DL4737	7.5	34	4.0	10	5	121	700	0.5	605
DL4738	8.2	31	4.5	10	6	110	700	0.5	550
DL4739	9.1	28	5.0	10	7	100	700	0.5	500
DL4740	10	25	7	10	7.6	91	700	0.25	454
DL4741	11	23	8	5	8.4	83	700	0.25	414
DL4742	12	21	9	5	9.1	76	700	0.25	380
DL4743	13	19	10	5	9.9	69	700	0.25	344
DL4744	15	17	14	5	11.4	61	700	0.25	304
DL4745	16	15.5	16	5	12.2	57	700	0.25	285
DL4746	18	14	20	5	13.7	50	750	0.25	250
DL4747	20	12.5	22	5	15.2	45	750	0.25	225
DL4748	22	11.5	23	5	16.7	41	750	0.25	205
DL4749	24	10.5	25	5	18.2	38	750	0.25	190
DL4750	27	9.5	35	5	20.6	34	750	0.25	170
DL4751	30	8.5	40	5	22.8	30	1000	0.25	150
DL4752	33	7.5	45	5	25.1	27	1000	0.25	135
DL4753	36	7.0	50	5	27.4	25	1000	0.25	125
DL4754	39	6.5	60	5	29.7	23	1000	0.25	115
DL4755	43	6.0	70	5	32.7	22	1500	0.25	110
DL4756	47	5.5	80	5	35.8	19	1500	0.25	95
DL4757	51	5.0	95	5	38.8	18	1500	0.25	90
DL4758	56	4.5	110	5	42.6	16	2000	0.25	80
DL4759	62	4.0	125	5	47.1	14	2000	0.25	70
DL4760	68	3.7	150	5	51.7	13	2000	0.25	65
DL4761	75	3.3	175	5	56.0	12	2000	0.25	60

NOTE 1 The JEDEC type numbers shown have A 5% tolerance on nominal zener voltage.
No suffix signifies 10% tolerance, A signifies 5% tolerance, C signifies 2% tolerance.

NOTE 2 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 DC 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 eliminate unstable units.

NOTE 3 The reverse surge current is measured at 25°C ambient using a 1/2 square wave or equivalent sine wave pulse 1/120 second duration superimposed on Izt

NOTE 4 Voltage measurements to be performed 90 seconds after application of DC current.

Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 5Kpcs/Reel

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