



Micro Commercial Components

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1N4728 THRU 1N4764

1.0 Watt Zener Diode 3.3 to 100 Volts

Features

- Hermetic Glass Package
- Silicon Planar Zener Diodes
- These diodes are also available in the MELF case with type designation DL4728 thru DL4764

Mechanical Data

- Case: DO-41 Molded Glass
- Marking : Cathode band and type number
- Weight: 0.309 grams (Approx.)

Maximum Ratings

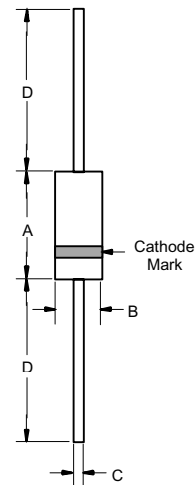
- Operating Temperature: -65°C to +200°C
- Storage Temperature: -65°C to +200°C
- For capacitive load, derate current by 20%

Electrical Characteristics @ 25°C Unless Otherwise Specified

DC Power Dissipation	P_d	1.0W	$T_A \leq 50^\circ\text{C}$
Forward Voltage Drop	V_F	1.2V	
Thermal Resistance	$R_{\theta JA}$	100°C/W	Note 1
Power Derating from 100°C	P_{tot}	10mW/°C	

Note: (1) Valid provided that electrodes at a distance of 10mm from case are kept at ambient temperature.

DO-41G



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.166	0.205	4.10	7.60	
B	0.080	0.107	2.00	3.60	Diameter
C	0.026	0.034	0.70	0.90	Diameter
D	1.000	-----	25.40	-----	

Electrical Characteristics (T_A = 25°C unless otherwise noted). Maximum V_F = 1.2V at I_F = 200mA

MCC Part Number	Zener Voltage	Test Current	Maximum Dynamic Impedance			Maximum Reverse Leakage Current		Surge Current	Maximum Regulator Current
	V _Z @ I _{ZT} Volts	I _{ZT} mA	Z _{ZT} @ I _{ZT} OHMS	Z _{ZK} @ I _{ZK} OHMS	I _{ZK} mA	I _R @ V _R uA	V _R Volts	I _R mA	I _{ZM} mA
1N4728	3.3	76	10	400	1	100	1	1380	276
1N4729	3.6	69	10	400	1	100	1	1260	252
1N4730	3.9	64	9	400	1	50	1	1190	234
1N4731	4.3	58	9	400	1	10	1	1070	217
1N4732	4.7	53	8	500	1	10	1	970	193
1N4733	5.1	49	7	550	1	10	1	890	178
1N4734	5.6	45	5	600	1	10	2	810	162
1N4735	6.2	41	2	700	1	10	3	730	146
1N4736	6.8	37	3.5	700	1	10	4	660	133
1N4737	7.5	34	4	700	0.5	10	5	605	121
1N4738	8.2	31	4.5	700	0.5	10	6	550	110
1N4739	9.1	28	5	700	0.5	10	7	500	100
1N4740	10	25	7	700	0.25	10	7.6	454	91
1N4741	11	23	8	700	0.25	5	8.4	414	83
1N4742	12	21	9	700	0.25	5	9.1	380	76
1N4743	13	19	10	700	0.25	5	9.9	344	69
1N4744	15	17	14	700	0.25	5	11.4	304	61
1N4745	16	15.5	16	700	0.25	5	12.2	285	57
1N4746	18	14	20	750	0.25	5	13.7	250	50
1N4747	20	12.5	22	750	0.25	5	15.2	225	45
1N4748	22	11.5	23	750	0.25	5	16.7	205	41
1N4749	24	10.5	25	750	0.25	5	18.2	190	38
1N4750	27	9.5	35	750	0.25	5	20.6	170	34
1N4751	30	8.5	40	1000	0.25	5	22.8	150	30
1N4752	33	7.5	45	1000	0.25	5	25.1	135	27
1N4753	36	7	50	1000	0.25	5	27.4	125	25
1N4754	39	6.5	60	1000	0.25	5	29.7	115	23
1N4755	43	6	70	1500	0.25	5	32.7	110	22
1N4756	47	5.5	80	1500	0.25	5	35.8	95	19
1N4757	51	5	95	1500	0.25	5	38.8	90	18
1N4758	56	4.5	110	2000	0.25	5	42.6	80	16
1N4759	62	4	125	2000	0.25	5	47.1	70	14
1N4760	68	3.7	150	2000	0.25	5	51.7	65	13
1N4761	75	3.3	175	2000	0.25	5	56	60	12
1N4762	82	3	200	3000	0.25	5	62.2	55	11
1N4763	91	2.8	250	3000	0.25	5	69.2	50	10
1N4764	100	2.5	350	3000	0.25	5	76	45	9

- Note**
- 1: The JEDEC type number shown with an A suffix have a 5% tolerance on nominal zener voltage. No suffix signifies a 10% tolerance, C signifies 2%, and D suffix signifies 1% tolerance.
 - 2: The Zener impedance is derived from the 60 Hz ac voltage, which results when an ac current having an rms value equal to 10% of the DC 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 eliminate unstable units.
 - 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 I_{ZT}.
 - 4: Voltage measurements to be performed 90 seconds after application of DC current.
 - 5: RoHs Compliant already and Pb-free sticker on reel , box & carton indicated RoHs compliant .



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