



Micro Commercial Components

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# 1N4728 THRU 1N4761

**1.0 Watt  
Zener Diode  
3.3 to 75 Volts**

## Features

- Hermetic Glass Package
- Silicon Planar Zener Diodes
- These diodes are also available in the MELF case with type designation DL4728 thru DL4761

## Mechanical Data

- Case: DO-41 Molded Glass
- Marking : Cathode band and type number
- Weight: 0.378 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	$T_A \leq 50^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	See Page 2	
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

DIMENSIONS					NOTE
DIM	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	-----	

# 1N4728 thru 1N4761



## Electrical Characteristics (T<sub>A</sub> = 25°C unless otherwise noted). Maximum V<sub>F</sub> = 1.2V at I<sub>F</sub> = 200mA

MCC PART NUMBER	ZENER VOLTAGE V <sub>Z</sub> VOLTS	TEST CURRENT I <sub>ZT</sub> mA	MAXIMUM DYNAMIC IMPEDANCE Z <sub>ZT</sub> @ I <sub>ZT</sub> OHMS	MAXIMUM REVERSE CURRENT I <sub>R</sub> @ V <sub>R</sub> μA	TEST VOLTAGE V <sub>R</sub> VOLTS	MAXIMUM KNEE IMPEDANCE Z <sub>ZK</sub> @ I <sub>ZK</sub> OHMS	TEST CURRENT I <sub>ZK</sub> mA
1N4728	3.3	76	10	100	1	400	1.0
1N4729	3.6	69	10	100	1	400	1.0
1N4730	3.9	64	9	50	1	400	1.0
1N4731	4.3	58	9	10	1	400	1.0
1N4732	4.7	53	8	10	1	500	1.0
1N4733	5.1	49	7	10	1	550	1.0
1N4734	5.6	45	5	10	2	600	1.0
1N4735	6.2	41	2	10	3	700	1.0
1N4736	6.8	37	3.5	10	4	700	1.0
1N4737	7.5	34	4.0	10	5	700	0.5
1N4738	8.2	31	4.5	10	6	700	0.5
1N4739	9.1	28	5.0	10	7	700	0.5
1N4740	10	25	7	10	7.6	700	0.25
1N4741	11	23	8	5	8.4	700	0.25
1N4742	12	21	9	5	9.1	700	0.25
1N4743	13	19	10	5	9.9	700	0.25
1N4744	15	17	14	5	11.4	700	0.25
1N4745	16	15.5	16	5	12.2	700	0.25
1N4746	18	14	20	5	13.7	750	0.25
1N4747	20	12.5	22	5	15.2	750	0.25
1N4748	22	11.5	23	5	16.7	750	0.25
1N4749	24	10.5	25	5	18.2	750	0.25
1N4750	27	9.5	35	5	20.6	750	0.25
1N4751	30	8.5	40	5	22.8	1000	0.25
1N4752	33	7.5	45	5	25.1	1000	0.25
1N4753	36	7.0	50	5	27.4	1000	0.25
1N4754	39	6.5	60	5	29.7	1000	0.25
1N4755	43	6.0	70	5	32.7	1500	0.25
1N4756	47	5.5	80	5	35.8	1500	0.25
1N4757	51	5.0	95	5	38.8	1500	0.25
1N4758	56	4.5	110	5	42.6	2000	0.25
1N4759	62	4.0	125	5	47.1	2000	0.25
1N4760	68	3.7	150	5	51.7	2000	0.25
1N4761	75	3.3	175	5	56.0	2000	0.25

- 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<sub>ZT</sub> or I<sub>ZK</sub>) is superimposed on I<sub>ZT</sub> or I<sub>ZK</sub>. 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<sub>ZT</sub>.
  - 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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