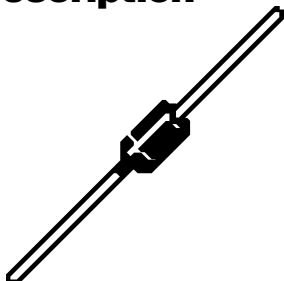


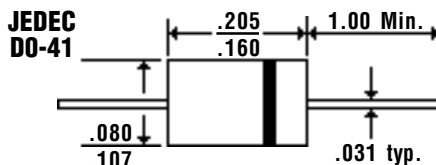
# 1 Watt ZENER DIODES (3.3V to 100V)

1N4728...4764 Series

## Description



## Mechanical Dimensions



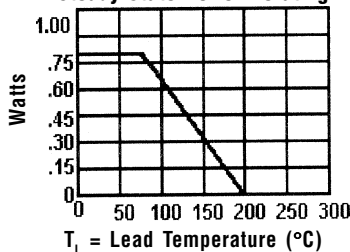
## Features

■ 5 & 10% VOLTAGE TOLERANCES AVAILABLE

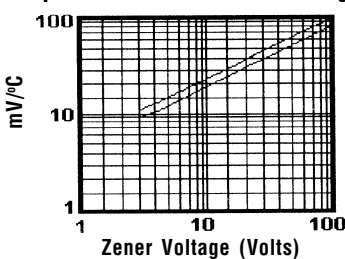
■ WIDE VOLTAGE RANGE  
■ MEETS UL SPECIFICATION 94V-0

Maximum Ratings	1N4728...4764 Series	Units
DC Power Dissipation with $T_L = > = 75^\circ\text{C}$ ... $P_D$	1	Watt
Lead Length = .375 Inches Derate Above $50^\circ\text{C}$	6.67	mW / $^\circ\text{C}$
Operating & Storage Temperature Range... $T_J$ , $T_{STRG}$	-65 to 100	$^\circ\text{C}$

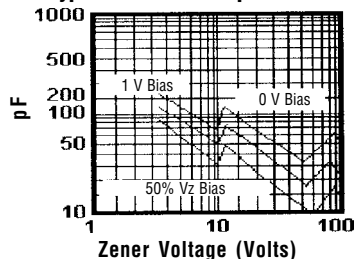
Steady State Power Derating



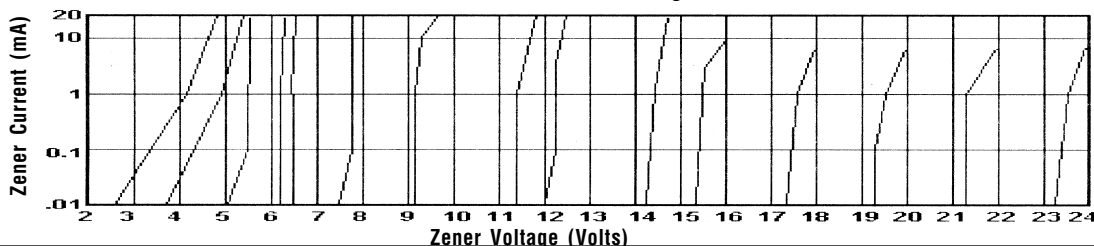
Temperature Coefficients vs. Voltage



Typical Junction Capacitance



Zener Current vs. Zener Voltage



# 1 Watt ZENER DIODES (3.3V to 100V)

**1N4728...4764 Series**

- NOTES:** 1. For 10% Tolerance on Zener Voltage, Specify No Suffix. For 5% Tolerance, Specify Suffix "A". (Example: 1N4728A = 3.3V +/- 5%)  
2.  $T_A = 25^\circ\text{C}$  unless otherwise specified. Measurements made at Thermal Equilibrium.

Lead Length = .375". Thermal Resistance of Heat Sink =  $30^\circ\text{C/W}$ ,  $V_F = 1.1\text{V Max.}$  @  $I_F = 200\text{mA}$ .

## Electrical Characteristics @ $25^\circ\text{C}$ .

Part # Jedec Type #	Nominal Zener Voltage	Test Current Izt Max	MAX. ZENER IMPEDANCE			MAX. REVERSE LEAKAGE CURRENT		MAX SURGE CURRENT $T_A = 25^\circ\text{C}$
			Zzt @ Izt Ohms	Zzk @ Izk Ohms	Izk mA	$I_R$ ( $\mu\text{A}$ )	$V_R$	
1N4728	3.3	76	10	400	1	100	1	1380
1N4729	3.6	69	10	400	1	100	1	1260
1N4730	3.9	64	9	400	1	50	1	1190
1N4731	4.3	58	9	400	1	10	1	1070
1N4732	4.7	53	8	500	1	10	1	970
1N4733	5.1	49	7	550	1	10	1	890
1N4734	5.6	45	5	600	1	10	2	810
1N4735	6.2	41	2	700	1	10	3	730
1N4736	7.5	37	3.5	700	1	10	4	660
1N4737	8.2	34	4	700	0.5	10	5	605
1N4738	6.0	31	4.5	700	0.5	10	6	550
1N4739	9.1	28	5	700	0.5	10	7	500
1N4740	10	25	7	700	0.25	10	7.6	454
1N4741	11	23	8	700	0.25	5	8.4	414
1N4742	12	21	9	700	0.25	5	9.1	380
1N4743	13	19	10	700	0.25	5	9.9	344
1N4744	15	17	14	700	0.25	5	11.4	304
1N4745	16	15.5	16	700	0.25	5	12.2	285
1N4746	18	14	20	750	0.25	5	13.7	250
1N4747	20	12.5	22	750	0.25	5	15.2	225
1N4748	22	11.5	23	750	0.25	5	16.7	205
1N4749	24	10.5	25	750	0.25	5	18.2	190
1N4750	27	9.5	35	750	0.25	5	20.6	170
1N4751	30	8.5	40	1000	0.25	5	22.8	150
1N4752	33	7.5	45	1000	0.25	5	25.1	135
1N4753	36	7.0	50	1500	0.25	5	27.4	125
1N4754	39	6.5	60	1500	0.25	5	29.7	115
1N4755	43	6.0	70	1500	0.25	5	32.7	110
1N4756	47	5.5	80	1500	0.25	5	35.8	95
1N4757	51	5.0	95	1500	0.25	5	38.8	90
1N4758	56	4.5	110	2000	0.25	5	42.6	80
1N4759	62	4.0	125	2000	0.25	5	47.1	70
1N4760	68	3.7	150	2000	0.25	5	51.7	65
1N4761	75	3.3	175	2000	0.25	5	56	60
1N4762	82	3.0	200	3000	0.25	5	62.2	55
1N4763	91	2.8	250	3000	0.25	5	69.2	50
1N4764	100	2.5	350	3000	0.25	5	76	45