

ZENER DIODES

1 WATT ZENER DIODE/DO-41 (CASE 7)

OPERATING AND STORAGE TEMPERATURE -65°C to +175°C

PART NO.	Zener Breakdown Voltage	Dynamic Impedances @ 25°C T _A				Maximum Reverse Current @ Measurement Voltage and 25°C T _A		Maximum Forward Voltage @ 25°C T _A I _F = 1.0A
		I _{ZT}	Z _{ZT}	I _{ZK}	Z _{ZK}	V _R	I _R	V _F
	V	mA	Ohms	mA	Ohms	V	uA	V
Z90	90	2.7	250	.25	2000	70	0.5	1.0
Z100	100	2.5	350	.25	3000	75	0.5	1.0
Z105	105	2.4	400	.25	3500	77	0.5	1.0
Z110	110	2.3	450	.25	4000	80	0.5	1.0
Z115	115	2.2	500	.25	4250	85	0.5	1.0
Z120	120	2.1	550	.25	4500	90	0.5	1.0
Z130	130	1.9	700	.25	5000	95	0.5	1.0
Z135	135	1.85	750	.25	5250	100	0.5	1.0
Z140	140	1.8	800	.25	5500	105	0.5	1.0
Z150	150	1.7	1000	.25	6000	110	0.5	1.0
Z160	160	1.6	1100	.25	6500	120	0.5	1.0
Z170	170	1.5	1200	.25	6750	130	0.5	1.0
Z180	180	1.4	1350	.25	7000	140	0.5	1.0
Z190	190	1.3	1500	.25	7500	150	0.5	1.0
Z200	200	1.2	1700	.25	8000	160	0.5	1.0
Z220	220	1.1	2000	.25	8250	170	0.5	1.0
Z240	240	1.0	2200	.25	8500	180	0.5	1.0
Z270	270	0.9	2500	.25	8750	200	0.5	1.0
Z300	300	0.8	3000	.25	9000	220	0.5	1.0
Z330	330	0.75	4000	.25	9500	240	0.5	1.0

NOTES : Standard Tolerance : ± 20% , Suffix " A " : ± 10% .

ZENER DIODES

1.0W ZENER DIODE / DO-41G

OPERATING TEMPERATURE -65°C to +175°C
STORAGE TEMPERATURE -65°C to +175°C

Electrical Characteristics (Ta = 25°C)

TYPE	ZENER VOLTAGE		MAX ZENER IMPEDANCE		MAX ZENER IMPEDANCE		MAXIMUM REVERSE CURRENT		TEMP. COEFF.
	Vz(v)	@IzT(mA)	ZzT(ohms)	@IzT(mA)	Zzk(ohms)	@Izk(mA)	@VR(V)	IR(uA)	dvz(% / °C)
1N4728A	3.3	76.0	10.0	76.0	400	1.00	1.0	100.0	-0.06
1N4729A	3.6	69.0	10.0	69.0	400	1.00	1.0	100.0	-0.06
1N4730A	3.9	64.0	9.0	64.0	400	1.00	1.0	50.0	-0.05
1N4731A	4.3	58.0	9.0	58.0	400	1.00	1.0	10.0	-0.03
1N4732A	4.7	53.0	8.0	53.0	500	1.00	1.0	10.0	-0.01
1N4733A	5.1	49.0	7.0	49.0	550	1.00	1.0	10.0	0.01
1N4734A	5.6	45.0	5.0	45.0	600	1.00	2.0	10.0	0.03
1N4735A	6.2	41.0	2.0	41.0	700	1.00	3.0	10.0	0.04
1N4736A	6.8	37.0	3.5	37.0	700	1.00	4.0	10.0	0.05
1N4737A	7.5	34.0	4.0	34.0	700	0.50	5.0	10.0	0.05
1N4738A	8.2	31.0	4.5	31.0	700	0.50	6.0	10.0	0.06
1N4739A	9.1	28.0	5.0	28.0	700	0.50	7.0	10.0	0.06
1N4740A	10.0	25.0	7.0	25.0	700	0.25	7.6	10.0	0.07
1N4741A	11.0	23.0	8.0	23.0	700	0.25	8.4	5.0	0.07
1N4742A	12.0	21.0	9.0	21.0	700	0.25	9.1	5.0	0.07
1N4743A	13.0	19.0	10.0	19.0	700	0.25	9.9	5.0	0.07
1N4744A	15.0	17.0	14.0	17.0	700	0.25	11.4	5.0	0.08
1N4745A	16.0	15.5	16.0	15.5	700	0.25	12.2	5.0	0.08
1N4746A	18.0	14.0	20.0	14.0	750	0.25	13.7	5.0	0.08
1N4747A	20.0	12.5	22.0	12.5	750	0.25	15.2	5.0	0.08
1N4748A	22.0	11.5	23.0	11.5	750	0.25	16.7	5.0	0.08
1N4749A	24.0	10.5	25.0	10.5	750	0.25	18.2	5.0	0.08
1N4750A	27.0	9.5	35.0	9.5	750	0.25	20.6	5.0	0.09
1N4751A	30.0	8.5	40.0	8.5	1000	0.25	22.6	5.0	0.09
1N4752A	33.0	7.5	45.0	7.5	1000	0.25	25.1	5.0	0.09
1N4753A	36.0	7.0	50.0	7.0	1000	0.25	27.4	5.0	0.09
1N4754A	39.0	6.5	60.0	6.5	1000	0.25	29.7	5.0	0.09
1N4755A	43.0	6.0	70.0	6.0	1500	0.25	32.7	5.0	0.09
1N4756A	47.0	5.5	80.0	5.5	1500	0.25	35.8	5.0	0.09
1N4757A	51.0	5.0	95.0	5.0	1500	0.25	38.8	5.0	0.09
1N4758A	56.0	4.5	110.0	5.0	2000	0.25	42.6	5.0	0.09

NOTES : Rectangular waveform (tp = 10ms)

ZENER DIODES

500mW ZENER DIODE / DO-35
Electrical Characteristics (Ta = 25°C)

OPERATING TEMPERATURE -65°C to +175°C
STORAGE TEMPERATURE -65°C to +175°C

TYPE	ZENER VOLTAGE		MAX ZENER IMPEDANCE		MAX ZENER IMPEDANCE I _{zk} = 0.25mA	MAXIMUM REVERSE CURRENT		TEMP. COEFF. dvz(% / °C)
	V _z (V)	I _{zt} (mA)	Z _{zt} (ohms)	I _{zt} (mA)		Z _{zk} (ohms)	V _R (V)	
1N5223B	2.7	20.0	30	20.0	1300	1.0	75.0	-0.080
1N5224B	2.8	20.0	30	20.0	1400	1.0	75.0	-0.080
1N5225B	3.0	20.0	29	20.0	1600	1.0	50.0	-0.075
1N5226B	3.3	20.0	28	20.0	1600	1.0	25.0	-0.070
1N5227B	3.6	20.0	24	20.0	1700	1.0	15.0	-0.065
1N5228B	3.9	20.0	23	20.0	1900	1.0	10.0	-0.060
1N5229B	4.3	20.0	22	20.0	2000	1.0	5.0	+/-0.055
1N5230B	4.7	20.0	19	20.0	1900	2.0	5.0	+/-0.030
1N5231B	5.1	20.0	17	20.0	1600	2.0	5.0	+/-0.030
1N5232B	5.6	20.0	11	20.0	1600	3.0	5.0	+/-0.038
1N5233B	6.0	20.0	7	20.0	1600	3.5	5.0	+/-0.038
1N5234B	6.2	20.0	7	20.0	1000	4.0	5.0	+0.045
1N5235B	6.8	20.0	5	20.0	750	5.6	3.0	+0.050
1N5236B	7.5	20.0	6	20.0	500	6.0	3.0	+0.058
1N5237B	8.2	20.0	8	20.0	500	6.5	3.0	+0.062
1N5238B	8.7	20.0	8	20.0	600	6.5	3.0	+0.065
1N5239B	9.1	20.0	10	20.0	600	7.0	3.0	+0.068
1N5240B	10.0	20.0	17	20.0	600	8.0	3.0	+0.075
1N5241B	11.0	20.0	22	20.0	600	8.4	2.0	+0.076
1N5242B	12.0	20.0	30	20.0	600	9.1	1.0	+0.077
1N5243B	13.0	9.5	13	9.5	600	9.9	0.5	+0.079
1N5244B	14.0	9.0	15	9.0	600	10.0	0.1	+0.082
1N5245B	15.0	8.5	16	8.5	600	11.0	0.1	+0.082
1N5246B	16.0	7.8	17	7.8	600	12.0	0.1	+0.083
1N5247B	17.0	7.4	19	7.4	600	13.0	0.1	+0.084
1N5248B	18.0	7.0	21	7.0	600	14.0	0.1	+0.085
1N5249B	19.0	6.6	23	6.6	600	14.0	0.1	+0.086
1N5250B	20.0	6.2	25	6.2	600	15.0	0.1	+0.086
1N5251B	22.0	5.6	29	5.6	600	17.0	0.1	+0.087
1N5252B	24.0	5.2	33	5.2	600	18.0	0.1	+0.088
1N5253B	25.0	5.0	35	5.0	600	19.0	0.1	+0.089
1N5254B	27.0	4.6	41	4.6	600	21.0	0.1	+0.090
1N5255B	28.0	4.5	44	4.5	600	21.0	0.1	+0.091
1N5256B	30.0	4.2	49	4.2	600	23.0	0.1	+0.091
1N5257B	33.0	3.8	58	3.8	700	25.0	0.1	+0.092
1N5258B	36.0	3.4	70	3.4	700	27.0	0.1	+0.093
1N5259B	39.0	3.2	80	3.2	800	30.0	0.1	+0.094
1N5260B	43.0	3.0	93	3.0	900	33.0	0.1	+0.095
1N5261B	47.0	2.7	105	2.7	1000	36.0	0.1	+0.095
1N5262B	51.0	2.5	125	2.5	1100	39.0	0.1	+0.096
1N5263B	56.0	2.2	150	2.2	1300	43.0	0.1	+0.096

NOTES : 1. The Electrical characteristics are measured after allowing the device to stabilize for 20 sec. when mounted with a 3/8" minimum lead length from the case.

2. Temperature Coefficient (dvz)

a. I_{zt} = 7.5ma, T₁ = 25°C, T₂ = 125°C (1N5223B - 1N5242B)

b. I_{zt} = rated I_{zt}, T₁ = 25°C, T₂ = 125°C (1N5243B - 1N5263B)