

# Diodes for HiRel Applications



DO-35



DO-213AA

## Low Noise Zener Diodes 1N5518B-1 to 1N5546B-1

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Types (Note 1)	Nominal Zener Voltage, $V_Z$ @ $I_{ZT}$ (Note 2)	Zener Test Current $I_{ZT}$	Maximum Zener Impedance B, C, D suffix $Z_T$ @ $I_{ZT}$ (Note 3)	Maximum Reverse Current, $I_R$ $V_R = \text{Volts}$	B, C, D Suffix Maximum Zener DC Current, $I_{ZM}$	B, C, D Suffix Maximum Noise Density, @ $I_{ZT} = 250 \text{ mA ND}$	Regulation Factor, $\Delta V_Z$	Low $V_Z$ Current, $I_{ZL}$		
	Volts	mA	Ohms	$\mu\text{A dc}$	NON & A- Suffix	B- C- D- Suffix	mA dc	$\mu\text{V} / \sqrt{\text{Hz}}$	Volts	mA dc
1N5518B-1, 1N5518BUR-1	3.3	20	26	5.0	0.90	1.0	115	0.5	0.90	2.0
1N5519B-1, 1N5519BUR-1	3.6	20	24	3.0	0.90	1.0	105	0.5	0.90	2.0
1N5520B-1, 1N5520BUR-1	3.9	20	22	1.0	0.90	1.0	98	0.5	0.85	2.0
1N5521B-1, 1N5521BUR-1	4.3	20	18	3.0	1.0	1.5	88	0.5	0.75	2.0
1N5522B-1, 1N5522BUR-1	4.7	10	22	2.0	1.5	2.0	81	0.5	0.60	1.0
1N5523B-1, 1N5523BUR-1	5.1	5.0	26	2.0	2.0	2.5	75	0.5	0.65	0.25
1N5524B-1, 1N5524BUR-1	5.6	3.0	30	2.0	3.0	3.5	68	1.0	0.30	0.25
1N5525B-1, 1N5525BUR-1	6.2	1.0	30	1.0	4.5	5.0	61	1.0	0.20	0.01
1N5526B-1, 1N5526BUR-1	6.8	1.0	30	1.0	5.5	6.2	56	1.0	0.10	0.01
1N5527B-1, 1N5527BUR-1	7.5	1.0	35	0.5	6.0	6.8	51	2.0	0.05	0.01
1N5528B-1, 1N5528BUR-1	8.2	1.0	40	0.5	6.5	7.5	46	4.0	0.05	0.01
1N5529B-1, 1N5529BUR-1	9.1	1.0	45	0.1	7.0	8.2	42	4.0	0.05	0.01
1N5530B-1, 1N5530BUR-1	10.0	1.0	60	0.05	8.0	9.1	38	4.0	0.10	0.01
1N5531B-1, 1N5531BUR-1	11.0	1.0	80	0.05	9.0	9.9	35	5.0	0.20	0.01
1N5532B-1, 1N5532BUR-1	12.0	1.0	90	0.05	9.5	0.8	32	10	0.20	0.01
1N5533B-1, 1N5533BUR-1	13.0	1.0	90	0.01	10.5	11.7	29	15	0.20	0.01
1N5534B-1, 1N5534BUR-1	14.0	1.0	100	0.01	11.5	12.6	27	20	0.20	0.01
1N5535B-1, 1N5535BUR-1	15.0	1.0	100	0.01	12.5	13.5	25	20	0.20	0.01
1N5536B-1, 1N5536BUR-1	16.0	1.0	100	0.01	13.0	14.4	24	20	0.20	0.01
1N5537B-1, 1N5537BUR-1	17.0	1.0	100	0.01	14.0	15.3	22	20	0.20	0.01
1N5538B-1, 1N5538BUR-1	18.0	1.0	100	0.01	15.0	16.2	21	20	0.20	0.01
1N5539B-1, 1N5539BUR-1	19.0	1.0	100	0.01	16.0	17.1	20	20	0.20	0.01
1N5540B-1, 1N5540BUR-1	20.0	1.0	100	0.01	17.0	18.0	19	20	0.20	0.01
1N5541B-1, 1N5541BUR-1	22.0	1.0	100	0.01	18.0	19.8	17	20	0.25	0.01
1N5542B-1, 1N5542BUR-1	24.0	1.0	100	0.01	20.0	21.6	16	20	0.30	0.01
1N5543B-1, 1N5543BUR-1	25.0	1.0	100	0.01	21.0	22.4	15	20	0.35	0.01
1N5544B-1, 1N5544BUR-1	28.0	1.0	100	0.01	23.0	25.2	14	20	0.40	0.01
1N5545B-1, 1N5545BUR-1	30.0	1.0	100	0.01	24.0	27.0	13	20	0.45	0.01
1N5546B-1, 1N5546BUR-1	33.0	1.0	100	0.01	28.0	29.7	12	20	0.50	0.01

Electrical specifications @  $T_A = +25^\circ\text{C}$  (unless otherwise specified).

NOTE 1: No Suffix type numbers are  $\pm 20\%$  with guaranteed limits for only  $V_Z$ ,  $I_R$ , and  $V_F$ . Units with "A" suffix are  $\pm 10\%$  with guaranteed limits for  $V_Z$ ,  $I_R$ , and  $V_F$ . Units with guaranteed limits for all six parameters are indicated by a "B" suffix for  $\pm 5.0\%$  units, "C" suffix for  $\pm 2.0\%$  and "D" suffix for  $\pm 1.0\%$ .

NOTE 2: Zener voltage is measured with the device junction in thermal equilibrium at an ambient temperature of  $25^\circ\text{C} \pm 3^\circ\text{C}$ .

NOTE 3: Zener impedance is derived by superimposing on  $I_{ZT}$  A 60 Hz rms a.c. current equal to 10% of  $I_{ZT}$ .



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## Zener Diodes 1N746A-1N759, 1N4370A-1N4372A

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Types (Note 1)	Nominal Zener Voltage, $V_Z$ @ $I_{ZT}$ (Note 2)	Zener Test Current $I_{ZT}$ (Note 2)	Maximum Zener Impedance $Z_T$ @ $I_{ZT}$ (Note 3)	Maximum Reverse Current, $I_R$ @ $V_R$	Maximum Zener Current, $I_{ZM}$
	Volts	mA	Ohms ( $\Omega$ )	$\mu\text{A}$	Volts
1N4370A-1, 1N4370AUR-1	2.4	20	30	100	155
1N4371A-1, 1N4371AUR-1	2.7	20	30	60	140
1N4372A-1, 1N4372AUR-1	3.0	20	29	30	125
1N746A-1, 1N746AUR-1	3.3	20	28	5	120
1N747A-1, 1N747AUR-1	3.6	20	24	3	110
1N748A-1, 1N748AUR-1	3.9	20	23	2	100
1N749A-1, 1N749AUR-1	4.3	20	22	2	90
1N750A-1, 1N750AUR-1	4.7	20	19	5	85
1N751A-1, 1N751AUR-1	5.1	20	17	5	75
1N752A-1, 1N752AUR-1	5.6	20	11	5	70
1N753A-1, 1N753AUR-1	6.2	20	7	5	65
1N754A-1, 1N754AUR-1	6.8	20	5	2	60
1N755A-1, 1N755AUR-1	7.5	20	6	2	55
1N756A-1, 1N756AUR-1	8.2	20	8	1	50
1N757A-1, 1N757AUR-1	9.1	20	10	1	45
1N758A-1, 1N758AUR-1	10.0	20	17	1	40
1N759A-1, 1N759AUR-1	12.0	20	30	1	35

Electrical specifications @  $T_A = +25^\circ\text{C}$  (unless otherwise specified).

NOTE 1: Zener voltage tolerance on "A" suffix is  $\pm 5\%$ . No Suffix denotes  $\pm 10\%$  tolerance, "C" suffix denotes  $\pm 2\%$  tolerance and "D" suffix denotes  $\pm 1\%$  tolerance.

NOTE 2: Zener voltage is measured with the device junction in thermal equilibrium at an ambient temperature of  $25^\circ\text{C} \pm 3^\circ\text{C}$ .

NOTE 3: Zener impedance is derived by superimposing on  $I_{ZT}$  A 60 Hz rms a.c. current equal to 10% of  $I_{ZT}$ .