Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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Low Noise Zener Diode Series

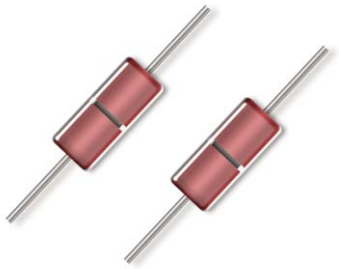
1N5518B-1 thru 1N5546B-1

NEW

AEROFLEX
A passion for performance.

Features

- 1N5518-1 THRU 1N5546B-1 Available in JAN, JANTX and JANTXV PER MIL-PRF-19500/437
- Low Reverse Leakage Characteristics
- Low Noise Characteristics
- Double Plug Construction
- Metallurgically Bonded
- Also available in DO-213 MELF style package.



Maximum Ratings

Junction and Storage Temperature: -65°C to +175°C

DC Power Dissipation: 500 mW @ +50°C

Power Derating: 4 mW / °C above +50°C

Forward Voltage @ 200mA: 1.1 volts maximum

Electrical Specifications @ +25 °C (Unless Otherwise Specified)

JEDEC TYPE Number (Note1)	Normal Zener Voltage V_Z @ I_{ZT}	Zener Test Current I_{ZT}	Maximum Zener Impedance B-C-D Suffix Z_{ZT} @ I_{ZT}	Maximum Reverse Leakage Current I_R	Maximum Reverse Leakage Current V_R = Volts		B-C-D Suffix Maximum DC Zener Current I_{ZM}	B-C-D Suff Maximum Noise Density @I_Z=250 µA N_D	Regulation Factor ΔV_Z (Note 2)	Low V_Z Current I_{ZL}
	Volts	mA	Ohms	µ Adc	NON & A- Suffix	B-C-D-Suffix	mAdc	µV / √Hz	Volts	mAdc
1N5518B	3.3	20	26	5.0	0.90	1.0	115	0.5	0.90	2.0
1N5519B	3.6	20	24	3.0	0.90	1.0	105	0.5	0.90	2.0
1N5520B	3.9	20	22	1.0	0.90	1.0	98	0.5	0.85	2.0
1N5521B	4.3	20	18	3.0	1.0	1.5	88	0.5	0.75	2.0
1N5522B	4.7	10	22	2.0	1.5	2.0	81	0.5	0.60	1.0
1N5523B	5.1	5.0	26	2.0	2.0	2.5	75	0.5	0.65	0.25
1N5524B	5.6	3.0	30	2.0	3.0	3.5	68	1.0	0.30	0.25
1N5525B	6.2	1.0	30	1.0	4.5	5.0	61	1.0	0.20	0.01
1N5526B	6.8	1.0	30	1.0	5.5	6.2	56	1.0	0.10	0.01
1N5527B	7.5	1.0	35	0.5	6.0	6.8	51	2.0	0.05	0.01
1N5528B	8.2	1.0	40	0.5	6.5	7.5	46	4.0	0.05	0.01
1N5529B	9.1	1.0	45	0.1	7.0	8.2	42	4.0	0.05	0.01
1N5530B	10.0	1.0	60	0.05	8.0	9.1	38	4.0	0.10	0.01
1N5531B	11.0	1.0	80	0.05	9.0	9.9	35	5.0	0.20	0.01
1N5532B	12.0	1.0	90	0.05	9.5	0.8	32	10	0.20	0.01
1N5533B	13.0	1.0	90	0.01	10.5	11.7	29	15	0.20	0.01
1N5534B	14.0	1.0	100	0.01	11.5	12.6	27	20	0.20	0.01
1N5535B	15.0	1.0	100	0.01	12.5	13.5	25	20	0.20	0.01
1N5536B	16.0	1.0	100	0.01	13.0	14.4	24	20	0.20	0.01
1N5537B	17.0	1.0	100	0.01	14.0	15.3	22	20	0.20	0.01
1N5538B	18.0	1.0	100	0.01	15.0	16.2	21	20	0.20	0.01
1N5539B	19.0	1.0	100	0.01	16.0	17.1	20	20	0.20	0.01
1N5540B	20.0	1.0	100	0.01	17.0	18.0	19	20	0.20	0.01
1N5541B	22.0	1.0	100	0.01	18.0	19.8	17	20	0.25	0.01
1N5542B	24.0	1.0	100	0.01	20.0	21.6	16	20	0.30	0.01
1N5543B	25.0	1.0	100	0.01	21.0	22.4	15	20	0.35	0.01
1N5544B	28.0	1.0	100	0.01	23.0	25.2	14	20	0.40	0.01
1N5545B	30.0	1.0	100	0.01	24.0	27.0	13	20	0.45	0.01
1N5546B	33.0	1.0	100	0.01	28.0	29.7	12	20	0.50	0.01

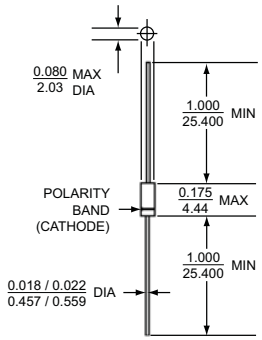
NOTE1: No Suffix type numbers are ±20% with guaranteed limits for only VZ, IR, and VF. Units with "A" suffix are ±10% with guaranteed limits for V_Z, I_R, and V_F. Units with guaranteed limits for all six parameters are indicated by a "B" suffix for ±5.0% units, "C" suffix for ±2.0% and "D" suffix for ±1.0%.

NOTE 2: Delta V_Z is the maximum difference between V_Z @ I_{ZT} and V_Z@ I_{ZL} measured with the device junction in thermal equilibrium.

AEROFLEX
METELICS

Revision Date: 2/28/2013

Outline Drawing



All dimensions in INCH / mm

LEADED DESIGN DATA

CASE: Hermetically sealed, DO – 35

LEAD MATERIAL: Copper clad steel

LEAD FINISH: Tin / Lead

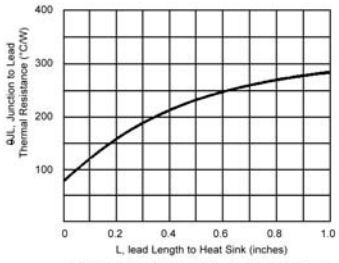
THERMAL RESISTANCE: ($R_{\Theta JEC}$): 250 °C/W maximum at L = 0.375 in

THERMAL IMPEDANCE: ($Z_{\Theta JX}$): 35 °C/W maximum

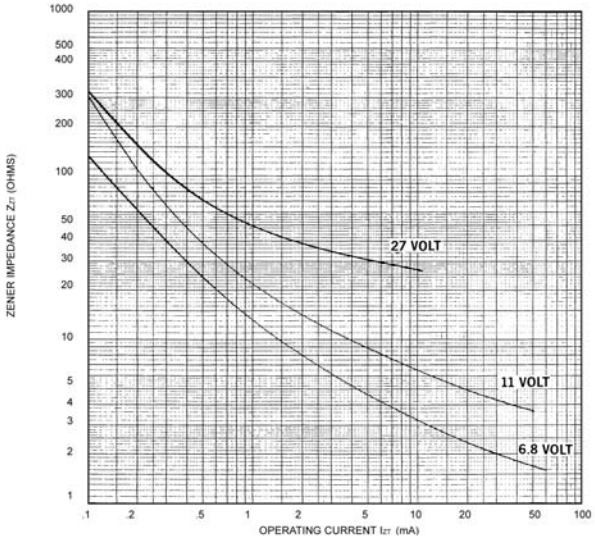
POLARITY: Diode to be operated with the banded (cathode) end positive.

MOUNTING POSITION: Any

Graphs



TYPICAL THERMAL RESISTANCE



ZENER IMPEDANCE VS. OPERATING CURRENT

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AEROFLEX
A passion for performance.

Our passion for performance is defined by three attributes represented by these three icons: solution-minded, performance-driven and customer-focused.

Revision Date: 2/28/2013