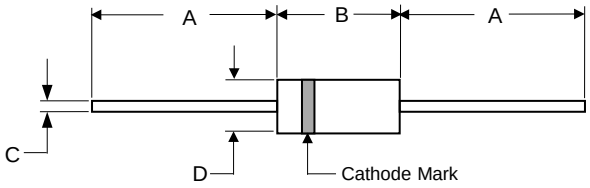
1N5518 THRU 1N5546

0.4W Low Voltage Avalanche Diodes

Features

* Low Zener noise specified
* Low Zener impedance
* Low leakage current
* Hermetically sealed glass package

RoHS COMPLIANT



DO-35				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	1.083	---	27.50	---
B	---	0.154	---	3.90
C	---	0.020	---	0.50
D	---	0.075	---	1.90

Mechanical Data

* Case: Hermetically sealed glass case, DO-35.
* Lead Material: Tinned copper clad steel.
* Marking: Body painted, alphanumeric.
* Polarity: Banded end is cathode.
* Thermal Resistance: 200℃/W(Typical) junction to lead at 0.375-inches from body. Metallurgic ally bonded DO-35's exhibit less than 100℃/Watt at zero distance from body.
* Operating temperature: -65℃ to +200℃；
* Storage temperature: -65℃ to +200℃.

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Electrical Characteristics (T_A=25℃ unless otherwise noted)

JEDEC Type No. (Note1)	Nominal Zener Voltage V_Z@I_{ZT} Volts (Note2)	Test Current I_{ZT} mAdc	Max Zener Impedance B-C-D Suffix Z_{ZT}@I_{ZT} OHMS (Note3)	Max Reverse Leakage Current			B-C-D Suffix Maximum DC Zener Current I_{ZM} mAdc (Note5)	B-C-D Suffix Max Noise Density at I_Z=250 μA ND (micro-volts per square root cycle)	Regulation ΔV_Z Volts (Note6)	Low V_Z Current I_{ZL} mAdc
				IR μAdc (Note4)	VR-Volts					
					NON&A Suffix	B-C-D Suffix				
1N5518	3.3	20	26	5	0.9	1	115	0.5	0.9	2
1N5519	3.6	20	24	3	0.9	1	105	0.5	0.9	2
1N5520	3.9	20	22	1	0.9	1	98	0.5	0.85	2
1N5521	4.3	20	18	3	1	1.5	88	0.5	0.75	2
1N5522	4.7	10	22	2	1.5	2	81	0.5	0.6	1
1N5523	5.1	5	26	2	2	2.5	75	0.5	0.65	0.25
1N5524	5.6	3	30	2	3	3.5	68	1	0.3	0.25
1N5525	6.2	1	30	1	4.5	5	61	1	0.2	0.01
1N5526	6.8	1	30	1	5.5	6.2	56	1	0.1	0.01
1N5527	7.5	1	35	0.5	6	6.8	51	2	0.05	0.01
1N5528	8.2	1	40	0.5	6.5	7.5	46	4	0.05	0.01
1N5529	9.1	1	45	0.1	7	8.2	42	4	0.05	0.01
1N5530	10	1	60	0.05	8	9.1	38	4	0.1	0.01
1N5531	11	1	80	0.05	9	9.9	35	5	0.2	0.01
1N5532	12	1	90	0.05	9.5	10.8	32	10	0.2	0.01
1N5533	13	1	90	0.01	10.5	11.7	29	15	0.2	0.01
1N5534	14	1	100	0.01	11.5	12.6	27	20	0.2	0.01
1N5535	15	1	100	0.01	12.5	13.5	25	20	0.2	0.01
1N5536	16	1	100	0.01	13	14.4	24	20	0.2	0.01
1N5537	17	1	100	0.01	14	15.3	22	20	0.2	0.01
1N5538	18	1	100	0.01	15	16.2	21	20	0.2	0.01
1N5539	19	1	100	0.01	16	17.1	20	20	0.2	0.01
1N5540	20	1	100	0.01	17	18	19	20	0.2	0.01
1N5541	22	1	100	0.01	18	19.8	17	20	0.25	0.01
1N5542	24	1	100	0.01	20	21.6	16	20	0.3	0.01
1N5543	25	1	100	0.01	21	22.4	15	20	0.35	0.01
1N5544	28	1	100	0.01	23	25.2	14	20	0.4	0.01
1N5545	30	1	100	0.01	24	27	13	20	0.45	0.01
1N5546	33	1	100	0.01	28	29.7	12	20	0.5	0.01

Notes:

1、Tolerance and Voltage Designation: The JEDEC type numbers shown are ±20% with guaranteed limits for only VZ,IR and VF. units with A suffix are±10% with guaranteed limits for only VZ,IR and VF. units with guaranteed limits for all six parameters are indicated by a B suffix for ±5% units, C suffix for ±2% and D suffix for ±1.0.

2、Zener(VZ) Voltage Measurement: Nominal Zener voltage is measured with the device junction in thermal equilibrium with ambient temperature of 25℃.

3、Zener Impedance(Z_Z) Derivation: The Zener impedance is derived from the 60HZ ac voltage, which results when an ac current having an rms value equal to 10% of the dc Zener current (I_{ZT} is superimposed on I_{ZT}).

4、Reverse Leakage Current(IR): Reverse leakage currents are guaranteed and are measured at VR as shown on the table.

5、Maximum Regulator Current(I_{ZM}): The maximum current shown is based on the maximum voltage of a 5.0% type unit; therefore, it applies only to the B suffix device. The actual I_{ZM} for any device may not exceed the value of 400 mill watts divided by the actual VZ of the device.

6、Maximum Regulation Factor(ΔVZ): ΔVZ is the maximum difference between V_Z at I_{ZT} and V_Z at I_{ZL} measured with the device junction in thermal equilibriu

Ratings and Characteristic Curves

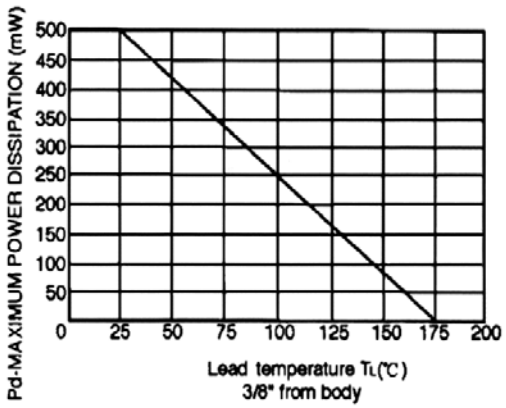


FIGURE 1 – POWER TEMPERATURE DERATING CURVE

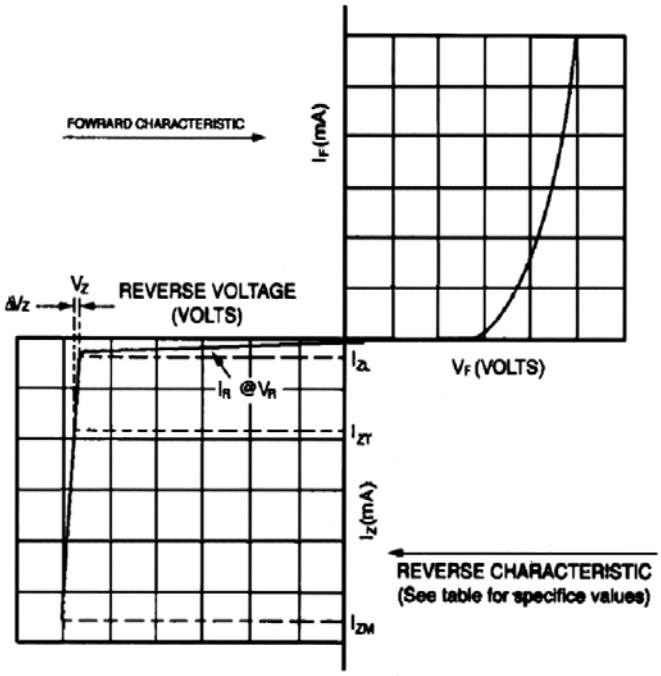
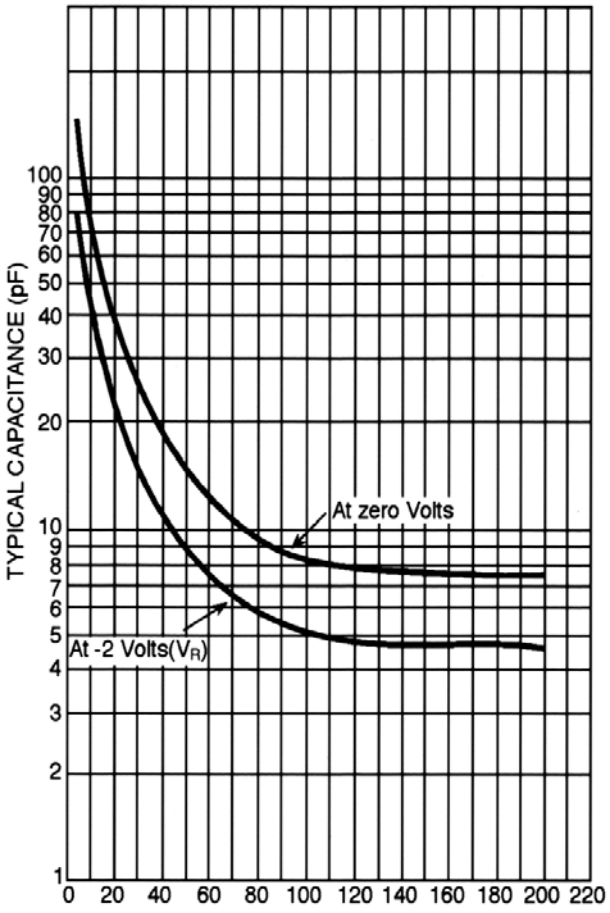


FIGURE 2 – ZENER DIODE CHARACTERISTICS
AND SYMBOL IDENTIFICATION



ZENER VOLTAGE V_Z

FIGURE 3 – CAPACITANCE VS. Vz CURVE

Ordering Information

Part No.	Package	Packing Code	Packing
1N5518 THRU 1N5546	DO-35	A50	5000pcs/Ammo

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