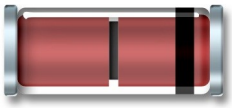
1N746AUR-1 - 1N759AUR-1, 1N4370AUR-1 - 1N4372AUR-1

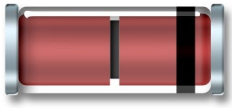
Silicon Zener Diode Series

Rev. V2

Features

- Metallurgically Bonded, Double Plugged Construction
- Leadless Package for Surface Mount
- Available in JAN, JANTX, JANTXV per MIL-PRF-19500 / 127





Electrical Specifications: T_A = +25°C (unless otherwise specified)

Part #	Nominal Zener Voltage V_{ZT} @ I_{ZT}[1]	Zener Test Current[2] I_{ZT}	Maximum Zener Impedance[3] Z_{ZT} @ I_{ZT}	Maximum Reverse Current I_R @ V_R		Maximum Zener Current I_{ZM}
	V	mA	Ω	µA	V	mA
1N746AUR-1	3.3	20	24	5	1.0	120
1N747AUR-1	3.6	20	22	3	1.0	110
1N748AUR-1	3.9	20	20	2	1.0	100
1N749AUR-1	4.3	20	18	2	1.0	90
1N750AUR-1	4.7	20	15	5	1.5	85
1N751AUR-1	5.1	20	14	5	2.0	75
1N752AUR-1	5.6	20	8	5	2.5	70
1N753AUR-1	6.2	20	3	5	3.5	65
1N754AUR-1	6.8	20	3	2	4.0	60
1N755AUR-1	7.5	20	4	2	5.0	55
1N756AUR-1	8.2	20	5	1	6.0	50
1N757AUR-1	9.1	20	6	1	7.0	45
1N758AUR-1	10.0	20	7	1	8.0	40
1N759AUR-1	12.0	20	10	1	9.0	35
1N4370AUR-1	2.4	20	30	100	1	155
1N4371AUR-1	2.7	20	30	60	1	140
1N4372AUR-1	3.0	20	29	30	1.0	125

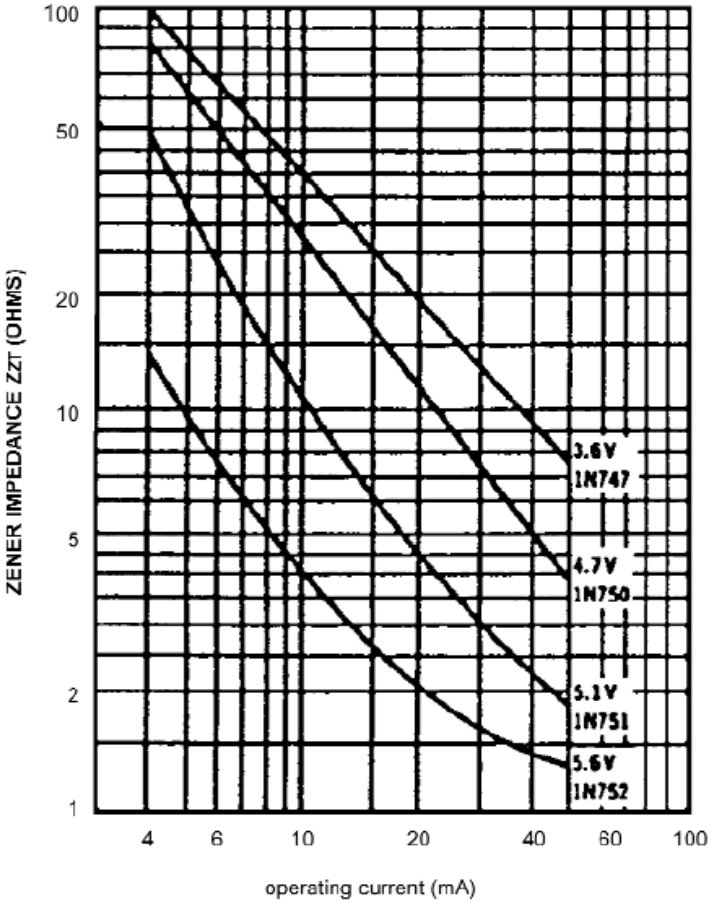
1. Zener voltage tolerance on "A" suffix is +5%. No Suffix denotes +10% tolerance, "C" suffix denotes +2% tolerance and "D" suffix denotes +1% tolerance.
2. Zener voltage is measured with the device junction in thermal equilibrium at an ambient temperature of 25°C + 3°C.
3. Zener impedance is derived by superimposing on I_{ZT} A 60Hz rms AC current equal to 10% of I_{ZT}.

Absolute Maximum Ratings[4,5]

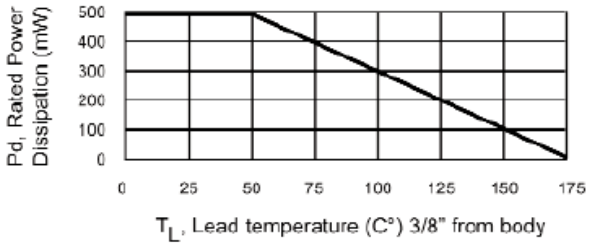
Parameter	Absolute Maximum
DC Power Dissipation	500 mW @ T_{EC} = +125°C
Power Derating	10 mW / °C above T_{EC} = +125°C
Forward Voltage	1.1 V @ 200 mA
Operating / Storage Temperature	-65°C to +175°C

4. Exceeding any one or combination of these limits may cause permanent damage to this device.
5. VPT Components does not recommend sustained operation near these survivability limits.

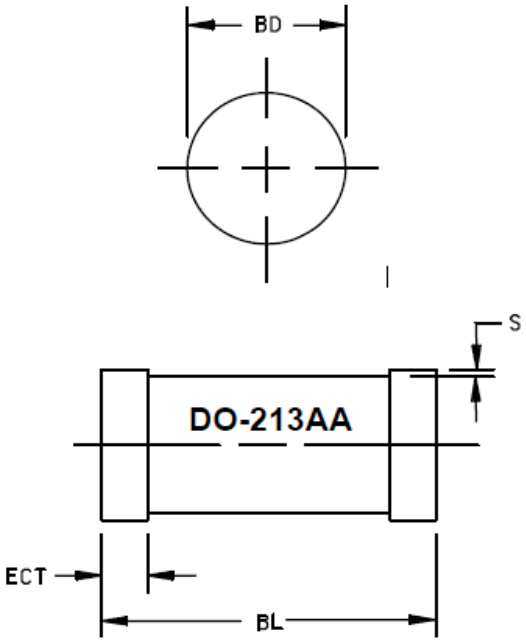
Zener Impedance vs. Operating Current



Power Derating Curve



Outline (DO – 213AA, Hermetically sealed glass case. (MELF, SOD-80, LL34)



LEADED DESIGN DATA

CASE: DO – 213AA, Hermetically sealed glass case. (MELF, SOD-80, LL34)

LEAD FINISH: Tin / Lead

POLARITY: Cathode end is banded.

MOUNTING POSITION: Any.

MOUNTING SURFACE SELECTION: The Axial Coefficient of Expansion (COE) Of this Device is Approximately +6 PPM/°C. The COE of the Mounting Surface System Should Be Selected To Provide A Suitable Match With This Device.

Dim.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
BL	0.130	0.146	3.30	3.71
BD	0.063	0.067	1.60	1.71
ECT	0.016	0.022	0.41	0.56
S	0.001 min		0.03 min	