1N4565UR-1 thru 1N4584UR-1 & 1N4565AUR-1 thru 1N4584AUR-1

Temperature Compensated Zener Reference Diode Series

Rev. V4

Features

- Available in JAN, JANTX, JANTXV and JANS per MIL-PRF-19500/452
- 6.4 V Nominal Zener Voltage ±5%
- 500 mW Power Handling
- Hermetically sealed MELF DO-213 package
- Also available in axial-leaded glass DO-35 style package.

Electrical Specifications:

I_R = 2 µA @ +25°C & V_R = 3 Vdc, T_A = +25°C (unless otherwise specified)

JEDEC Type #	Zener Test Current I_{ZT}	Effective Temperature Coefficient	Voltage Temperature Stability ΔV_{ZT} max.[1]	Temperature Range	Maximum Dynamic Zener Impeadance[2]
	mA	%/°C	mV	°C	Ω
1N4565UR-1 1N4565AUR-1	0.5	0.01	48 100	0 to +75 -55 to +100	200
1N4566UR-1 1N4566AUR-1	0.5	0.005	24 50	0 to +75 -55 to +100	200
1N4567UR-1 1N4567AUR-1	0.5	0.002	10 20	0 to +75 -55 to +100	200
1N4568UR-1 1N4568AUR-1	0.5	0.001	5 10	0 to +75 -55 to +100	200
1N4569UR-1 1N4569AUR-1	0.5	0.0005	2.5 5.0	0 to +75 -55 to +100	200
1N4570UR-1 1N4570AUR-1	1.0	0.01	48 100	0 to +75 -55 to +100	100
1N4571UR-1 1N4571AUR-1	1.0	0.005	24 50	0 to +75 -55 to +100	100
1N4572UR-1 1N4572AUR-1	1.0	0.002	10 20	0 to +75 -55 to +100	100
1N4573UR-1 1N4573AUR-1	1.0	0.001	5 10	0 to +75 -55 to +100	100
1N4574UR-1 1N4574AUR-1	1.0	0.0005	2.5 5.0	0 to +75 -55 to +100	100
1N4575UR-1 1N4575AUR-1	2.0	0.01	48 100	0 to +75 -55 to +100	50
1N4576UR-1 1N4576AUR-1	2.0	0.005	24 50	0 to +75 -55 to +100	50

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1N4565UR-1 thru 1N4584UR-1 & 1N4565AUR-1 thru 1N4584AUR-1

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Rev. V4

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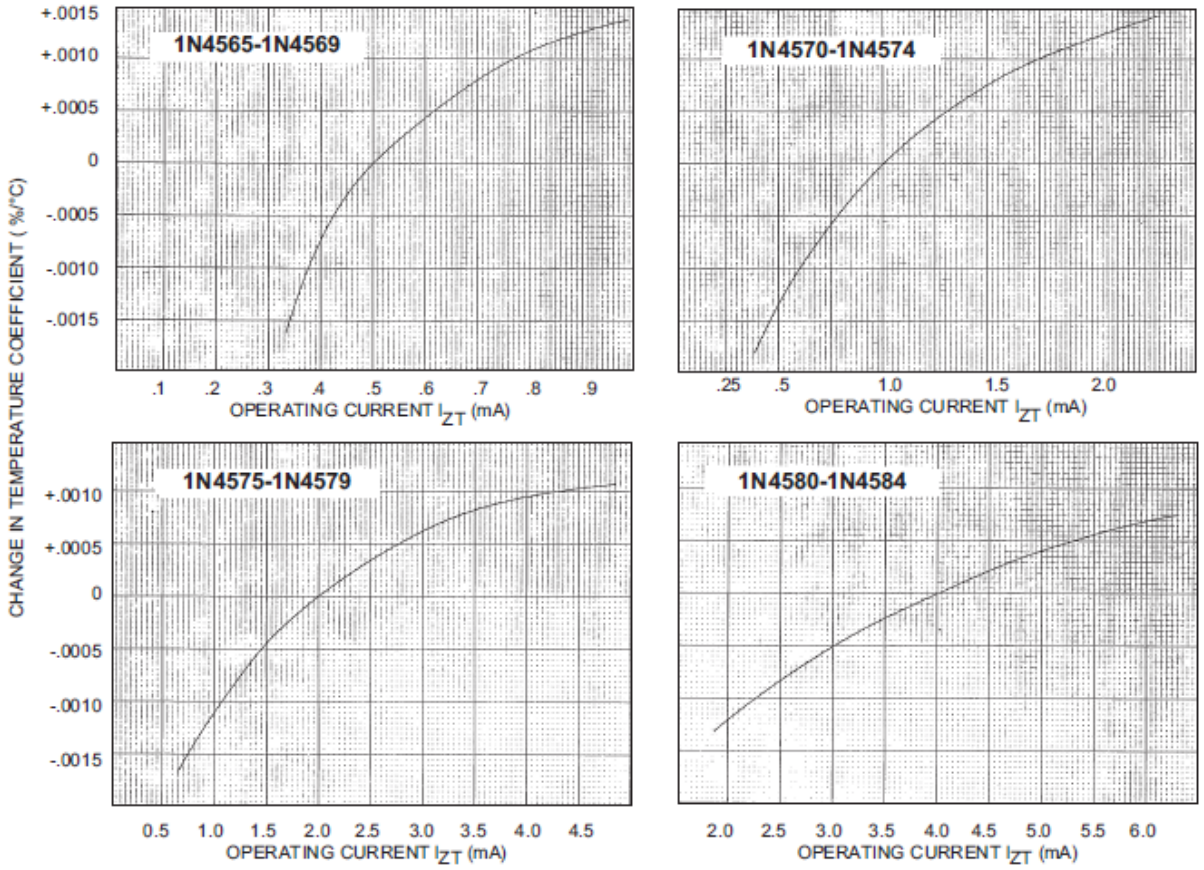
I_R = 2 µA @ +25°C & V_R = 3 Vdc, T_A = +25°C (unless otherwise specified)

JEDEC Type #	Zener Test Current I_{ZT}	Effective Temperature Coefficient	Voltage Temperature Stability ΔV_{ZT} max.[1]	Temperature Range	Maximum Dynamic Zener Impeadance[2]
	mA	%/°C	mV	°C	Ω
1N4577UR-1 1N4577AUR-1	2.0	0.002	10 20	0 to +75 -55 to +100	50
1N4578UR-1 1N4578AUR-1	2.0	0.001	5 10	0 to +75 -55 to +100	50
1N4579UR-1 1N4579AUR-1	2.0	0.0005	2.5 5.0	0 to +75 -55 to +100	50
1N4580UR-1 1N4580AUR-1	4.0	0.01	48 100	0 to +75 -55 to +100	25
1N4581UR-1 1N4581AUR-1	4.0	0.005	24 50	0 to +75 -55 to +100	25
1N4582UR-1 1N4582AUR-1	4.0	0.002	10 20	0 to +75 -55 to +100	25
1N4583UR-1 1N4583AUR-1	4.0	0.001	5 10	0 to +75 -55 to +100	25
1N4584UR-1 1N4584AUR-1	4.0	0.0005	2.5 5.0	0 to +75 -55 to +100	25

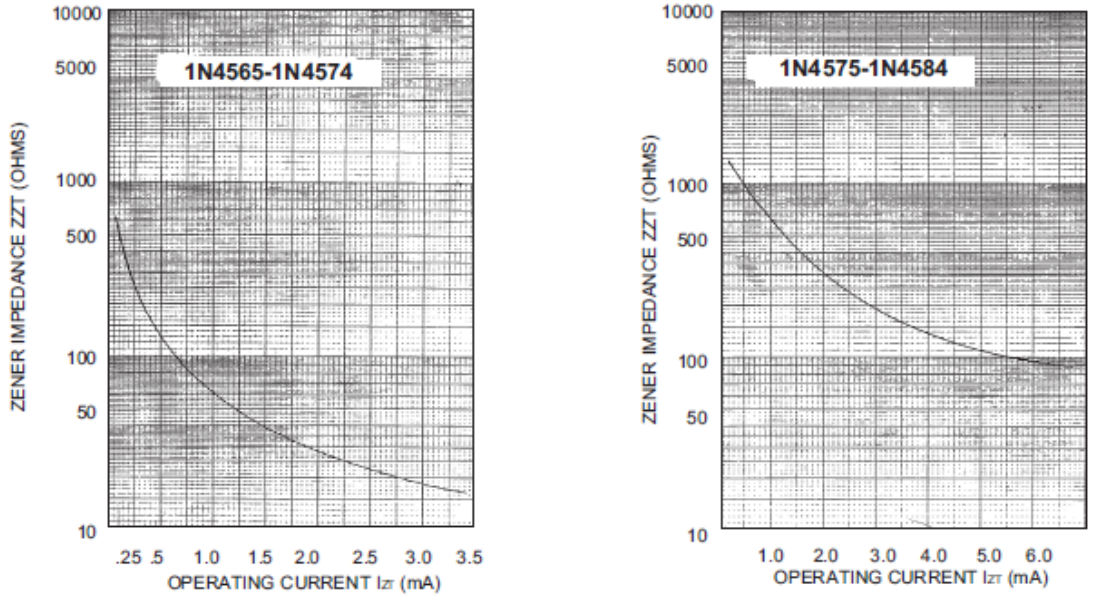
1. The maximum allowable change observed over the entire temperature range i.e., the diode voltage will not exceed the specified mV at any discrete temperature between the established limits, per JEDEC standard No. 5.
2. Zener impedance is derived by superimposing on I_{ZT} A 60Hz rms a.c. current equal to 10% of I_{ZT}.

Absolute Maximum Ratings

Parameter	Absolute Maximum
DC Power Dissipation	500 mW @ +50°C
Power Derating	4 mW/°C above +50°C
Operating & Storage Temperature	-55°C to +175°C

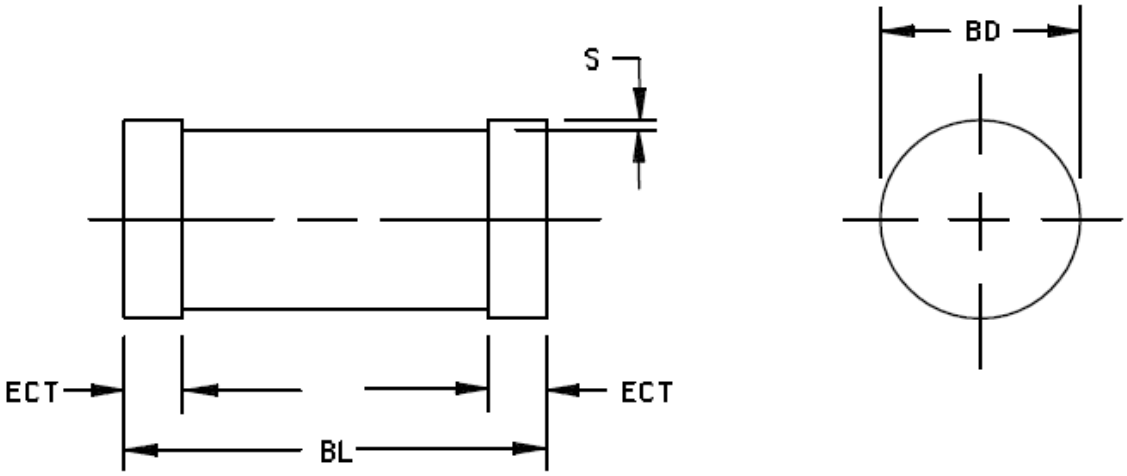


TYPICAL CHANGE OF TEMPERATURE COEFFICIENT WITH CHANGE IN OPERATING CURRENT



ZENER IMPEDANCE VS. OPERATING CURRENT

Outline (DO-213AA)



Symbol	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	.063	.067	1.60	1.70
ECT	.016	.022	0.41	0.56
BL	.130	.146	3.30	3.71
S	.001 Min		0.03 Min	

NOTES:
1. Dimensions are in inches. Millimeters are given for general information only.
2. In accordance with ASME Y14.5M, diameters are equivalent to ϕx symbology.

FIGURE 2. Physical dimensions of DO-213AA (1N4565AUR-1 through 1N4584AUR-1).