



Micro Commercial Components



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1N4729AW THRU 1N4761AW

1.0 Watt

Zener Diode

3.6 to 75 Volts

Features

- Silicon planar power zener diodes
- Low profile surface-mount package
- Lead Free Finish/Rohs Compliant ("P" Suffix designates Rohs Compliant. See ordering information)
- Moisture Sensitivity: Level 1
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

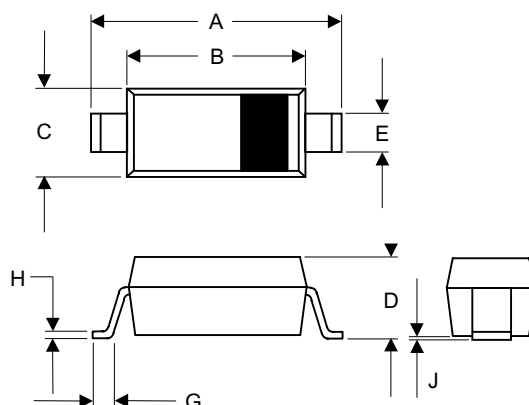
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

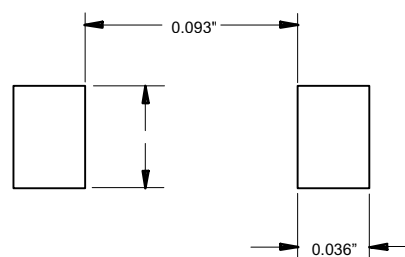
DC Power Dissipation	P_d	1.0W	$T_A=25^\circ\text{C}$
Forward Voltage Drop	V_F	1.2V	
Thermal Resistance	R_{thJA}	100K/W	Note 1
Power Derating from 100°C	P_{tot}	10mW/°C	

Note: (1) Valid provided that electrodes at a distance of 10mm from case are kept at ambient temperature.

SOD123



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	----	.053	----	1.35	
E	.012	.031	0.30	.78	
G	.006	----	0.15	----	
H	----	.01	----	.25	
J	----	.006	----	.15	



1N4729AW thru 1N4761AW

Electrical Characteristics (T_A = 25°C unless otherwise noted). Maximum V_F = 1.2V at I_F = 200mA

MCC Part Number	Zener Voltage	Test Current	Maximum Dynamic Impedance			Maximum Reverse Leakage Current		Surge Current	Maximum Regulator Current	Device Marking
	V _Z @ I _{ZT} Volts	I _{ZT} mA	Z _{ZT} @ I _{ZT} OHMS	Z _{ZK} @ I _{ZK} OHMS	I _{ZK} mA	I _R @ V _R uA	V _R Volts	I _R mA	I _{ZM} mA	
1N4729AW	3.6	69	10	400	1	100	1	1260	252	729
1N4730AW	3.9	64	9	400	1	50	1	1190	234	730
1N4731AW	4.3	58	9	400	1	10	1	1070	217	731
1N4732AW	4.7	53	8	500	1	10	1	970	193	732
1N4733AW	5.1	49	7	550	1	10	1	890	178	733
1N4734AW	5.6	45	5	600	1	10	2	810	162	734
1N4735AW	6.2	41	2	700	1	10	3	730	146	735
1N4736AW	6.8	37	3.5	700	1	10	4	660	133	736
1N4737AW	7.5	34	4	700	0.5	10	5	605	121	737
1N4738AW	8.2	31	4.5	700	0.5	10	6	550	110	738
1N4739AW	9.1	28	5	700	0.5	10	7	500	100	739
1N4740AW	10	25	7	700	0.25	10	7.6	454	91	740
1N4741AW	11	23	8	700	0.25	5	8.4	414	83	741
1N4742AW	12	21	9	700	0.25	5	9.1	380	76	742
1N4743AW	13	19	10	700	0.25	5	9.9	344	69	743
1N4744AW	15	17	14	700	0.25	5	11.4	304	61	744
1N4745AW	16	15.5	16	700	0.25	5	12.2	285	57	745
1N4746AW	18	14	20	750	0.25	5	13.7	250	50	746
1N4747AW	20	12.5	22	750	0.25	5	15.2	225	45	747
1N4748AW	22	11.5	23	750	0.25	5	16.7	205	41	748
1N4749AW	24	10.5	25	750	0.25	5	18.2	190	38	749
1N4750AW	27	9.5	35	750	0.25	5	20.6	170	34	750
1N4751AW	30	8.5	40	1000	0.25	5	22.8	150	30	751
1N4752AW	33	7.5	45	1000	0.25	5	25.1	135	27	752
1N4753AW	36	7	50	1000	0.25	5	27.4	125	25	753
1N4754AW	39	6.5	60	1000	0.25	5	29.7	115	23	754
1N4755AW	43	6	70	1500	0.25	5	32.7	110	22	755
1N4756AW	47	5.5	80	1500	0.25	5	35.8	95	19	756
1N4757AW	51	5	95	1500	0.25	5	38.8	90	18	757
1N4758AW	56	4.5	110	2000	0.25	5	42.6	80	16	758
1N4759AW	62	4	125	2000	0.25	5	47.1	70	14	759
1N4760AW	68	3.7	150	2000	0.25	5	51.7	65	13	760
1N4761AW	75	3.3	175	2000	0.25	5	56	60	12	761

Note 1: V_Z: tolerance +/-5%

- The Zener impedance is derived from the 60 Hz ac voltage, which results when an ac current having an rms value equal to 10% of the DC Zener current(I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK}. Zener impedance is measured at two points to insure a sharp knee on the breakdown curve and eliminate unstable units.
- The reverse surge current is measured at 25°C ambient using a 1/2 square wave or equivalent sine wave pulse 1/120 second duration superimposed on I_{ZT}.
- Voltage measurements to be performed 90 seconds after application of DC current.
- RoHs Compliant already and Pb-free sticker on reel , box & carton indicated RoHs compliant .

1N4729AW thru 1N4761AW

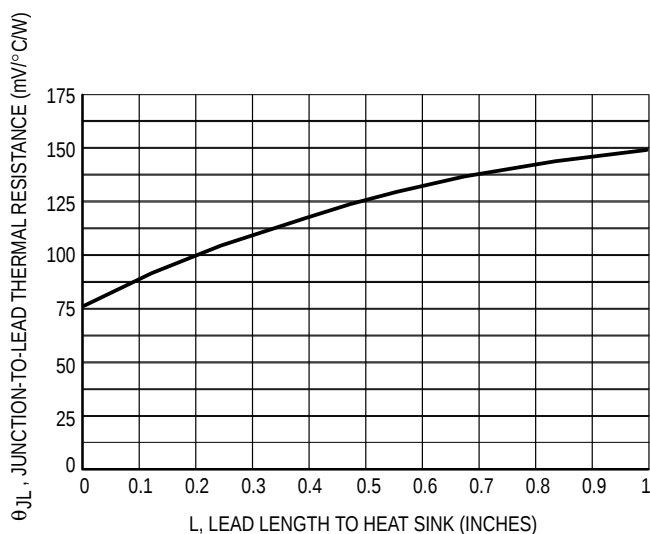


Figure 1. Typical Thermal Resistance versus Lead Length

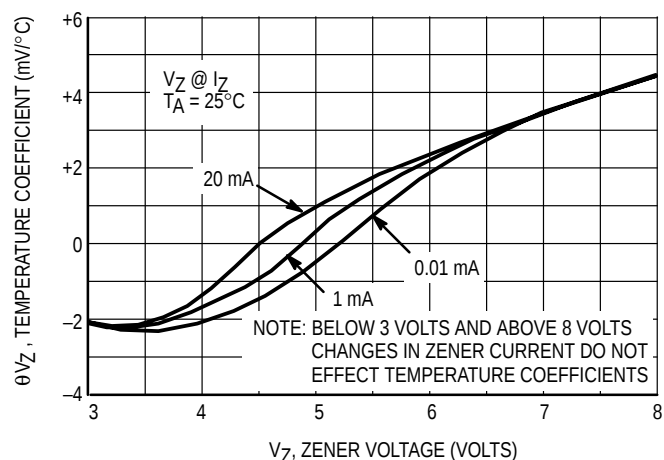


Figure 2. Effect of Zener Current

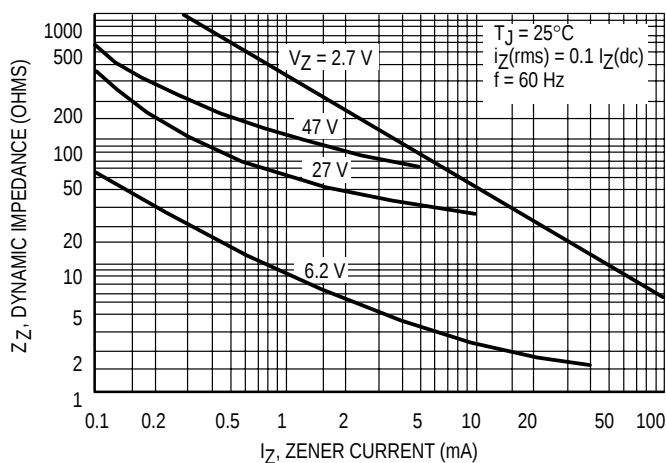


Figure 3. Effect of Zener Current on Zener Impedance

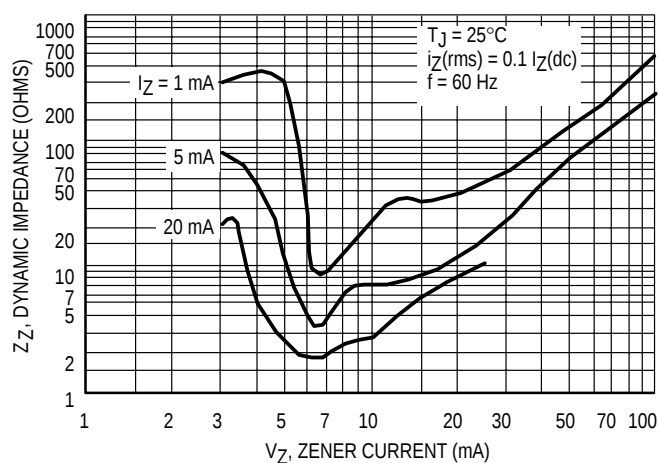


Figure 4. Effect of Zener Voltage on Zener Impedance



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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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