1W Axial Lead Zener Diodes

FEATURES：
- Low zener impedance.
- Power Dissipation of 1W
- High temperature soldering guaranteed 260℃/10 Seconds, at terminals
- RoHS compliant.

DO-41

MECHANICAL DATA：
- Case：Molded Plastic DO-41
- Polarity：Color band denotes cathode end
- Terminals：Solderable per MIL-STD-750, Method 2026 guaranteed

MAXIMUM RATINGS (Ratings at 25 ℃ ambient temperature unless otherwise specified)

Parameter	Symbol	Value	Unit
Power Dissipation T_A=25°C	P_D	1	W
Operation Junction Temperature Range	T_J	-55 to +175	°C
Storage Temperature Range	T_{STG}	-55 to +175	°C

ELECTRICAL CHARACTERISTICS (T =25°C unless otherwise noted)

Type	Zener Voltage range @I_{ZT}			Z_{ZT}@I_{ZT}	Z_{ZK}@I_{ZK}	I_{ZK}	Maximum Reverse Leakage Current		DC Zener Current
Number	Nom(V)	Min(V)	I_{ZT}(mA)	ohm	ohm	mA	I_R(uA)	V_R(V)	I_{ZM}(mA)
1N4728A	3.14	3.47	76	10	400	1	100	1	276
1N4729A	3.42	3.78	69	10	400	1	100	1	252
1N4730A	3.71	4.10	64	9	400	1	50	1	234
1N4731A	7.12	4.52	58	9	400	1	10	1	217
1N4732A	4.47	4.94	53	8	500	1	10	1	193
1N4733A	4.85	5.36	49	7	550	1	10	1	178
1N4734A	5.32	5.88	45	5	600	1	10	2	162
1N4735A	5.89	6.51	41	2	700	1	10	3	146
1N4736A	6.46	7.14	37	3.5	700	1	10	4	133
1N4737A	7.13	7.88	34	4	700	0.5	10	5	121
1N4738A	7.79	8.61	31	4.5	700	0.5	10	6	110
1N4739A	8.65	9.56	28	5	700	0.5	10	7	100
1N4740A	9.50	10.50	25	7	700	0.25	10	7.6	91
1N4741A	10.45	11.55	23	8	700	0.25	5	8.4	83
1N4742A	11.40	12.60	21	9	700	0.25	5	9.1	76
1N4743A	12.35	13.65	19	10	700	0.25	5	9.9	69
1N4744A	14.25	15.75	17	14	700	0.25	5	11.4	61
1N4745A	15.20	16.80	15.5	16	700	0.25	5	12.2	57
1N4746A	17.10	18.90	14	20	750	0.25	5	13.7	50
1N4747A	19.00	21.00	12.5	22	750	0.25	5	15.2	45
1N4748A	20.90	23.10	11.5	23	750	0.25	5	16.7	41
1N4749A	22.80	25.20	10.5	25	750	0.25	5	18.2	38
1N4750A	25.65	28.35	9.5	35	750	0.25	5	20.6	34
1N4751A	28.50	31.50	8.5	40	1000	0.25	5	22.8	30
1N4752A	31.35	34.65	7.5	45	1000	0.25	5	25.1	27
1N4753A	34.20	37.80	7	50	1000	0.25	5	27.4	25
1N4754A	37.05	40.95	6.5	60	1000	0.25	5	29.7	23
1N4755A	40.85	45.15	6	70	1500	0.25	5	32.7	22
1N4756A	44.65	49.35	5.5	80	1500	0.25	5	35.8	19
1N4757A	48.45	53.55	5	95	1500	0.25	5	38.8	18
1N4758A	53.20	58.80	4.5	110	2000	0.25	5	42.6	16
1N4759A	58.90	65.10	4	125	2000	0.25	5	47.1	14
1N4760A	64.60	71.40	3.7	150	2000	0.25	5	51.7	13
1N4761A	71.25	78.75	3.3	175	2000	0.25	5	56	12
1N4762A	77.90	86.10	3	200	3000	0.25	5	62.2	11
1N4763A	86.45	95.55	2.8	250	3000	0.25	5	69.2	10
1N4764A	95.00	105.0	2.5	350	3000	0.25	5	76	9

Typical Characteristics Curve

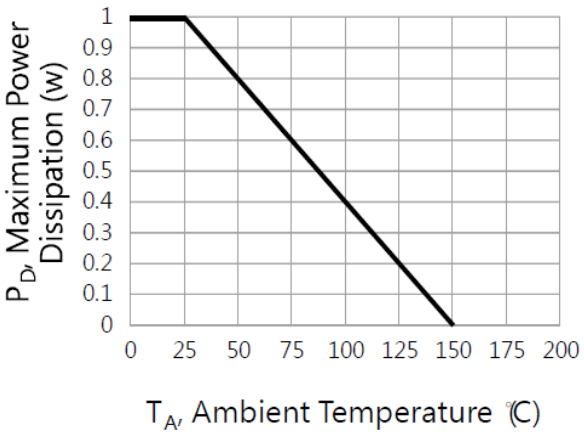


Figure 1. Steady -State Power Derating Curve

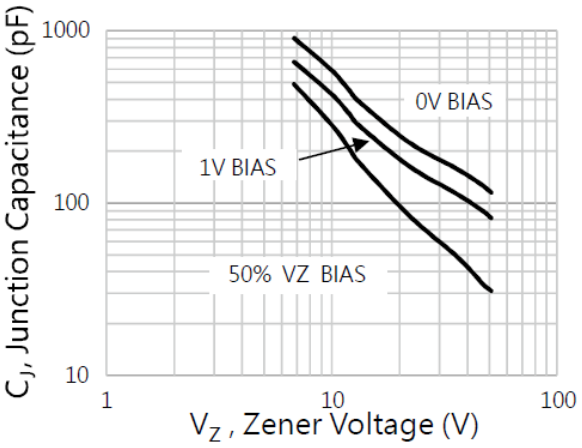


Figure 2. Typical Junction Capacitance

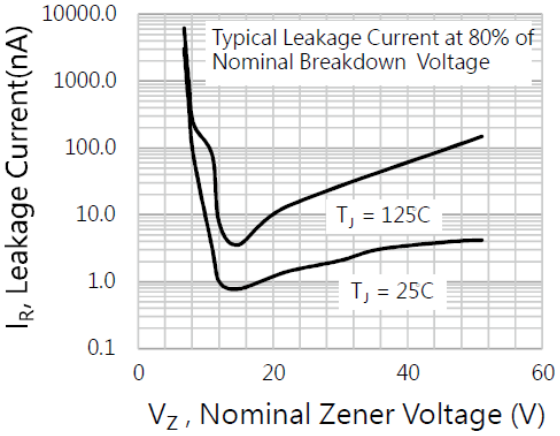


Figure 3. Typical Leakage Characteristics

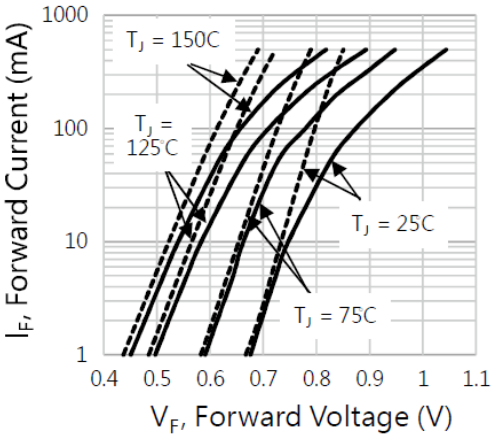


Figure 4. Typical Forward Characteristics

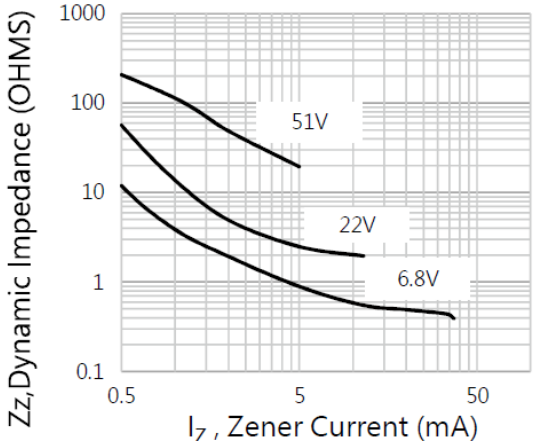


Figure 5. Typical Effect Of Zener Current On Zener Impedance

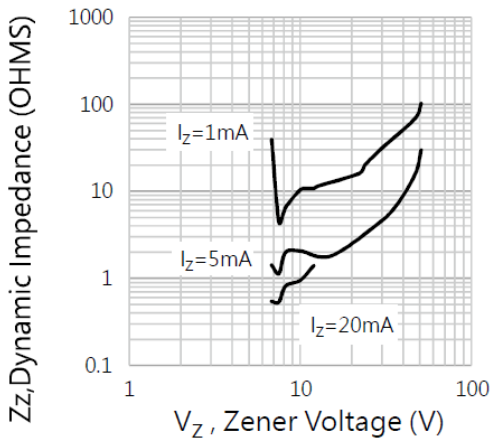


Figure 6. Typical Effect Of Zener Voltage On Zener Impedance

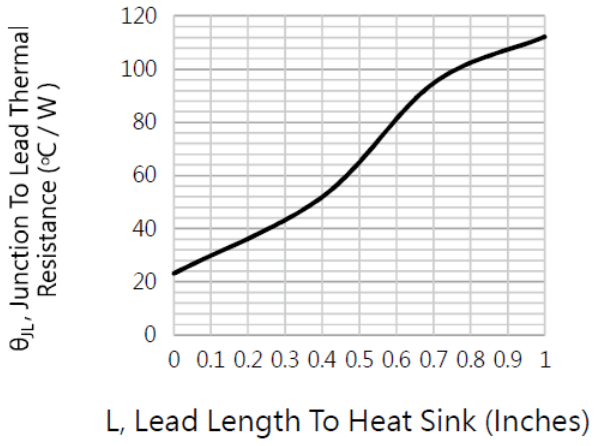


Figure 7. Thermal Resistance Versus Lead Length

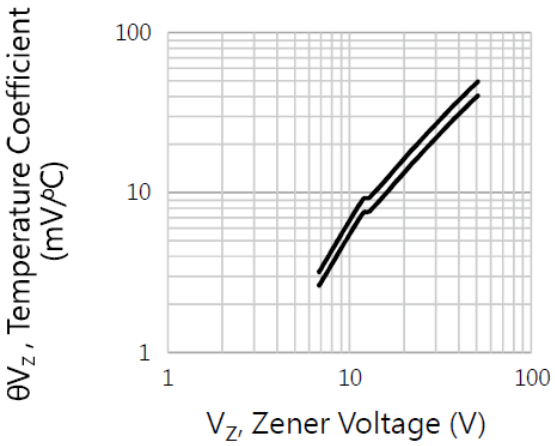
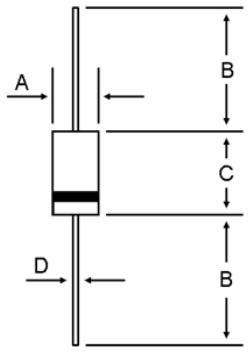


Figure 8. Temperature Coefficient (+25℃ To +150℃ Temperature Range ; 90% of The Units Are In The Ranges Indicated)

• Package outlines : Dimensions in millimeters



DIM	MILLIMETERS	
	MIN	MAX
A	2.00	2.80
B	25.40	---
C	4.00	5.30
D	0.55	0.90

Notice

MOSPEC reserves the rights to make changes of the content herein the document anytime without notification. MOSPEC or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies. Please refer to MOSPEC website for the last document.

MOSPEC disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially incurred.

Application shown on the herein document are examples of standard use and operation. Customers are responsible for comprehending suitable use in particular applications. MOSPEC makes no representation or warranty that such application will be suitable for the specified use without further testing or modification.

The information contained herein is presented only as a guide for the applications of our products. No responsibility is assumed by MOSPEC for any infringements of patents or other rights of the third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of MOSPEC or others.

These MOSPEC products are intended for usage in general electronic equipment. Please make sure to consult with MOSPEC before you use these MOSPEC products in equipment which require specialized quality and/or reliability, and in equipment which could have major impact to the welfare of human life (atomic energy control, aeronautics , traffic control, combustion control, safety devices etc.)