

1W AXIAL LEAD ZENER DIODES, 100V – 330V

The diagram illustrates the physical dimensions of a 1W Axial Lead Zener Diode. It shows a central black rectangular body with a white band in the middle. Two leads extend from the body, one at the top and one at the bottom. Dimension A is the total length of the device, including the leads. Dimension B is the length of the black body. Dimension C is the length of the leads. Dimension D is the diameter of the leads. A note indicates that A is 2 PL (lead length).

Value Inch[mm]		
Dim.	Min.	Max.
A	1.000[25.40]	---
B	0.166[4.22]	0.205[5.21]
C	0.080[2.03]	0.107[2.72]
D	0.028[0.71]	0.034[0.86]

PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION 94V-0
2. GLASS PASSIVATED CHIP CONSTRUCTION
3. WIDE ZENER VOLTAGE RANGE FROM 100V TO 330V
4. LOW ZENER IMPEDANCE, BUILT-IN STRAIN RELIEF
5. POLARITY: INDICATED BY CATHODE BAND
6. MOLDED PLASTIC CASE DO-41
7. DIMENSIONS IN INCHES AND (MILLIMETERS)
8. LEADS: SOLDERABILITY PER MIL-STD-202 METHOD 208
9. WEIGHT: 0.33 GRAMS
10. RoHS COMPLIANT. ADD SUFFIX "-H" FOR HALOGEN FREE PART. i.e. Z10-100B-H.

ELECTRICAL CHARACTERISTICS

MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT
FORWARD VOLTAGE @ $I_F = 200\text{mA}$	V_F			1.20	V
POWER DISSIPATION	P_D			1.0	W
OPERATING TEMPERATURE	T_J	-55		+150	$^\circ\text{C}$
STORAGE TEMPERATURE	T_{STG}	-65		+175	$^\circ\text{C}$



Z10-100B THRU Z10-330B SPECIFICATION

Rev. A

Part No.	Marking code	Zener			Test Current	Zener Impedance			Leakage Current	
		V _Z @ I _{ZT} (Volts)				I _{ZT}	Z _{1T} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	I _R
		Min.	Nom.	Max.	mA	(Ω)Max	(Ω)Max	mA	(uA)Max	Volts
Z10-100B	Z10-100B	95	100	105	5.0	750	5000	0.25	0.5	75
Z10-105B	Z10-105B	99.75	105	110.25	5.0	750	5000	0.25	0.5	77
Z10-110B	Z10-110B	104.5	110	115.5	5.0	750	5000	0.25	0.5	80
Z10-115B	Z10-115B	109.25	115	120.75	5.0	750	5000	0.25	0.5	85
Z10-120B	Z10-120B	114	120	126	5.0	850	5000	0.25	0.5	90
Z10-130B	Z10-130B	123.5	130	136.5	5.0	1000	5000	0.25	0.5	95
Z10-140B	Z10-140B	133	140	147	5.0	1200	5000	0.25	0.5	105
Z10-150B	Z10-150B	142.5	150	157.5	5.0	1300	5000	0.25	0.5	110
Z10-160B	Z10-160B	152	160	168	5.0	1500	5000	0.25	0.5	120
Z10-170B	Z10-170B	161.5	170	178.5	5.0	2200	5000	0.25	0.5	130
Z10-180B	Z10-180B	171	180	189	5.0	2200	5000	0.25	0.5	140
Z10-190B	Z10-190B	180.5	190	199.5	5.0	2500	5000	0.25	0.5	150
Z10-200B	Z10-200B	190	200	210	5.0	2500	8000	0.25	0.5	165
Z10-210B	Z10-210B	199.5	210	220.5	5.0	5000	9000	0.25	0.5	165
Z10-220B	Z10-220B	209	220	231	5.0	5000	9000	0.25	0.5	170
Z10-230B	Z10-230B	218.5	230	241.5	5.0	5000	9000	0.25	0.5	175
Z10-240B	Z10-240B	228	240	252	5.0	5000	9000	0.25	0.5	180
Z10-250B	Z10-250B	237.5	250	262.5	5.0	5000	9000	0.25	0.5	190
Z10-260B	Z10-260B	247	260	273	5.0	5000	9000	0.25	0.5	195
Z10-270B	Z10-270B	256.5	270	283.5	5.0	5000	9000	0.25	0.5	200
Z10-280B	Z10-280B	266	280	294	5.0	5000	9000	0.25	0.5	210
Z10-290B	Z10-290B	275.5	290	304.5	5.0	5000	9000	0.25	0.5	215
Z10-300B	Z10-300B	285	300	315	5.0	5000	9000	0.25	0.5	220
Z10-310B	Z10-310B	294.5	310	325.5	5.0	5000	9000	0.25	0.5	225
Z10-320B	Z10-320B	304	320	336	5.0	5000	9000	0.25	0.5	233
Z10-330B	Z10-330B	313.5	330	346.5	5.0	5000	9000	0.25	0.5	240

Note : Suffix B denotes 5% tolerance of Zener voltage



RATINGS AND CHARACTERISTIC CURVES

FIG. 1-TOTAL POWER DISSIPATION VS. AMBIENT TEMPERATURE

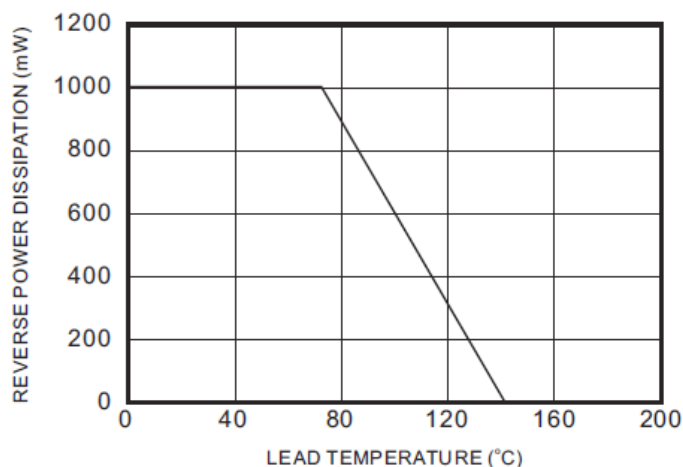


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

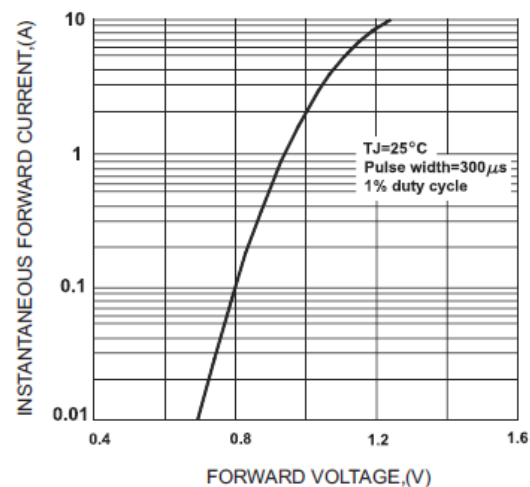


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

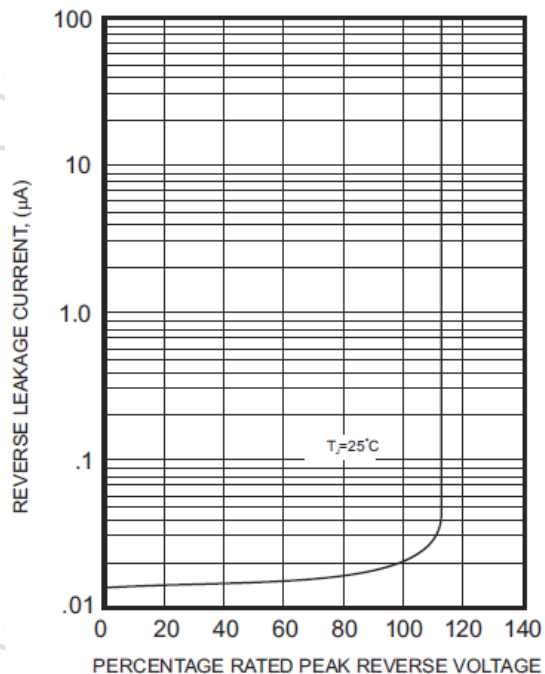


FIG. 4 - TYPICAL TEMPERATURE COEFFICIENTS

