

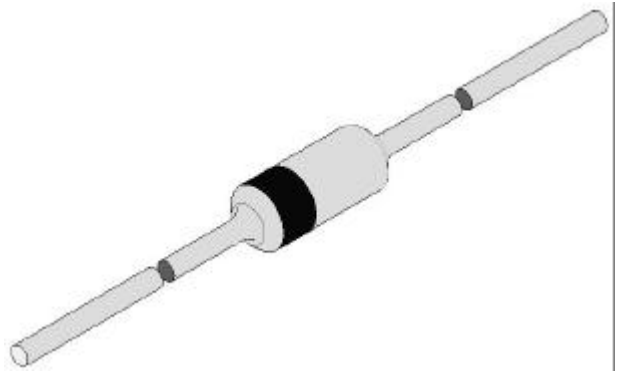
# Zener diode

## Features

1. High reliability
2. Very sharp reverse characteristic
3. Low reverse current level
4.  $V_Z$ -tolerance  $\pm 5\%$

## Applications

Voltage stabilization



## Absolute Maximum Ratings

$T_j=25^\circ\text{C}$

Parameter	Test Conditions	Type	Symbol	Value	Unit
Power dissipation	$T_{amb}=75^\circ\text{C}$		$P_V$	500	mW
Z-current			$I_Z$	$P_V/V_Z$	mA
Junction temperature			$T_j$	200	?
Storage temperature range			$T_{stg}$	-65~+200	?

## Maximum Thermal Resistance

$T_j=25^\circ\text{C}$

Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	$l=9.5\text{mm}(3/8")$ $T_L=\text{constant}$	$R_{thJA}$	300	K/W

## Electrical Characteristics

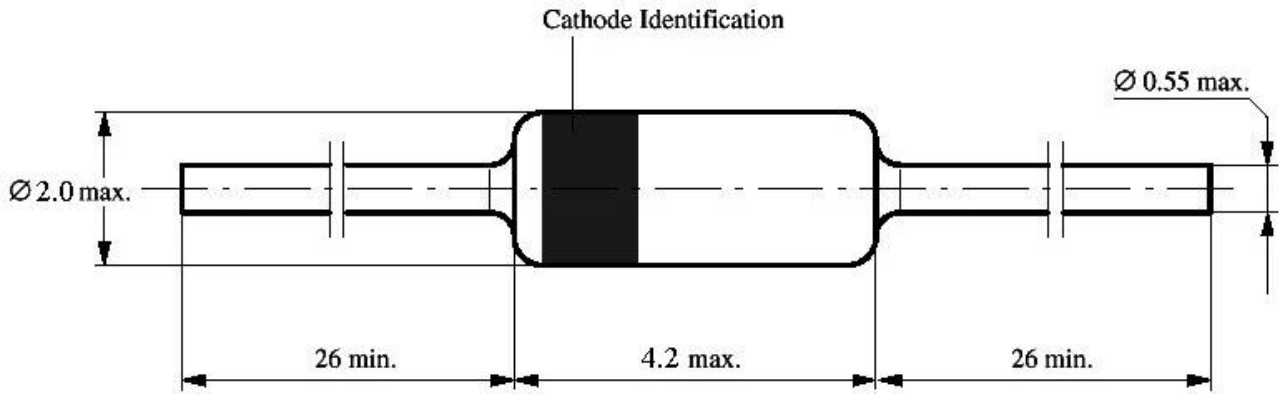
$T_j=25^\circ\text{C}$

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=200\text{mA}$		$V_F$			1.1	V

Type	$V_{Znom}^{1)}$	$I_{ZT}$	for	$r_{zIT}$	$r_{zIK}$	at	$I_K$	$I_R$	at	$V_R$	$TK_{VZ}$
	V	mA	0	0	0	mA	$\mu A$	$\mu A$	V	%/K	
1N5221B	2.4	20	<30	<1200	0.25	<100	1.0	<-0.085			
1N5222B	2.5	20	<30	<1250	0.25	<100	1.0	<-0.085			
1N5223B	2.7	20	<30	<1300	0.25	<75	1.0	<-0.080			
1N5224B	2.8	20	<30	<1400	0.25	<75	1.0	<-0.080			
1N5225B	3.0	20	<29	<1600	0.25	<50	1.0	<-0.075			
1N5226B	3.3	20	<28	<1600	0.25	<25	1.0	<-0.070			
1N5227B	3.6	20	<24	<1700	0.25	<15	1.0	<-0.065			
1N5228B	3.9	20	<23	<1900	0.25	<10	1.0	<-0.060			
1N5229B	4.3	20	<22	<2000	0.25	<5	1.0	<+0.055			
1N5230B	4.7	20	<19	<1900	0.25	<5	2.0	<+0.030			
1N5231B	5.1	20	<17	<1600	0.25	<5	2.0	<+0.030			
1N5232B	5.6	20	<11	<1600	0.25	<5	3.0	<+0.038			
1N5233B	6.0	20	<7	<1600	0.25	<5	3.5	<+0.038			
1N5234B	6.2	20	<7	<1000	0.25	<5	4.0	<+0.045			
1N5235B	6.8	20	<5	<750	0.25	<3	5.0	<+0.050			
1N5236B	7.5	20	<6	<500	0.25	<3	6.0	<+0.058			
1N5237B	8.2	20	<8	<500	0.25	<3	6.5	<+0.062			
1N5238B	8.7	20	<8	<600	0.25	<3	6.5	<+0.065			
1N5239B	9.1	20	<10	<600	0.25	<3	7.0	<+0.068			
1N5240B	10	20	<17	<600	0.25	<3	8.0	<+0.075			
1N5241B	11	20	<22	<600	0.25	<2	8.4	<+0.076			
1N5242B	12	20	<30	<600	0.25	<1	9.1	<+0.077			
1N5243B	13	9.5	<13	<600	0.25	<0.5	9.9	<+0.079			
1N5244B	14	9.0	<15	<600	0.25	<0.1	10	<+0.082			
1N5245B	15	8.5	<16	<600	0.25	<0.1	11	<+0.082			
1N5246B	16	7.8	<17	<600	0.25	<0.1	12	<+0.083			
1N5247B	17	7.4	<19	<600	0.25	<0.1	13	<+0.084			
1N5248B	18	7.0	<21	<600	0.25	<0.1	14	<+0.085			
1N5249B	19	6.6	<23	<600	0.25	<0.1	15	<+0.086			
1N5250B	20	6.2	<25	<600	0.25	<0.1	16	<+0.086			
1N5251B	22	5.6	<29	<600	0.25	<0.1	17	<+0.087			
1N5252B	24	5.2	<33	<600	0.25	<0.1	18	<+0.088			
1N5253B	25	5.0	<35	<600	0.25	<0.1	19	<+0.089			
1N5254B	27	4.6	<41	<600	0.25	<0.1	21	<+0.090			
1N5255B	28	4.5	<44	<600	0.25	<0.1	21	<+0.091			
1N5256B	30	4.2	<49	<600	0.25	<0.1	23	<+0.091			
1N5257B	33	3.8	<58	<700	0.25	<0.1	25	<+0.092			
1N5258B	36	3.4	<70	<700	0.25	<0.1	27	<+0.093			
1N5259B	39	3.2	<80	<800	0.25	<0.1	30	<+0.094			
1N5260B	43	3.0	<93	<900	0.25	<0.1	33	<+0.095			
1N5261B	47	2.7	<105	<1000	0.25	<0.1	36	<+0.095			
1N5262B	51	2.5	<125	<1100	0.25	<0.1	39	<+0.096			
1N5263B	56	2.2	<150	<1300	0.25	<0.1	43	<+0.096			
1N5264B	60	2.1	<170	<1400	0.25	<0.1	46	<+0.097			
1N5265B	62	2.0	<185	<1400	0.25	<0.1	47	<+0.097			
1N5266B	68	1.8	<230	<1600	0.25	<0.1	52	<+0.097			
1N5267B	75	1.7	<270	<1700	0.25	<0.1	58	<+0.098			

1) Based on DC-measurement at thermal equilibrium while maintaining the lead temperature( $T_L$ ) at 30° , 9.5mm(3/8") from the diode body.

Dimensions in mm



Standard Glass Case  
JEDEC DO 35