

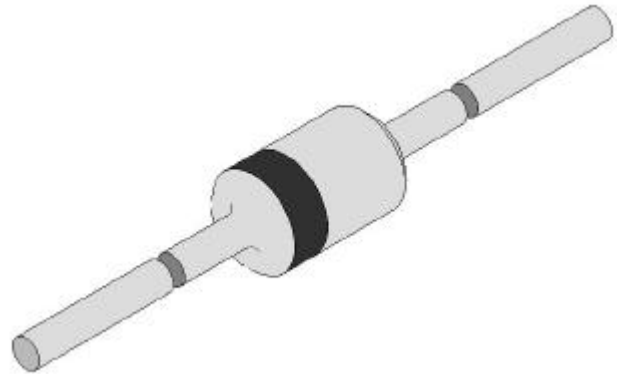
# Zener diode

## 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	$T_{\text{amb}}= 50^\circ\text{C}$		$P_V$	1	W
Z-current			$I_Z$	$P_V/V_Z$	mA
Junction temperature			$T_J$	200	$^\circ\text{C}$
Storage temperature range			$T_{\text{stg}}$	-65~+175	$^\circ\text{C}$

## Maximum Thermal Resistance

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

Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	$l=9.5\text{mm}(3/8")$ $T_L=\text{constant}$	$R_{\text{thJA}}$	100	K/W

## Electrical Characteristics

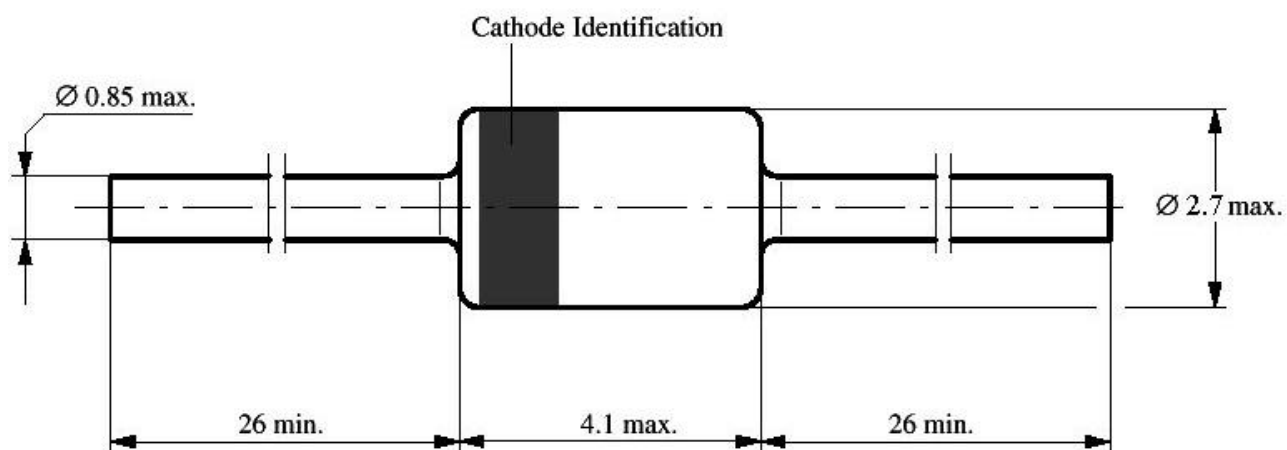
$T_J=25^\circ\text{C}$

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=200\text{mA}$		$V_F$			1.2	V

Type	$V_{Znom}^{1)}$	$I_{ZT}$	for	$r_{zIT}$	$r_{zIK}$	at	$I_K$	at	$V_R$
	V	mA		0	0		mA	$\mu A$	V
1N4728A	3.3	76		<10	<400		1	<100	1
1N4729A	3.6	69		<10	<400		1	<100	1
1N4730A	3.9	64		<9	<400		1	<50	1
1N4731A	4.3	58		<9	<400		1	<10	1
1N4732A	4.7	53		<8	<500		1	<10	1
1N4733A	5.1	49		<7	<550		1	<10	1
1N4734A	5.6	45		<5	<600		1	<10	2
1N4735A	6.2	41		<2	<700		1	<10	3
1N4736A	6.8	37		<3.5	<700		1	<10	4
1N4737A	7.5	34		<4.0	<700		0.5	<10	5
1N4738A	8.2	31		<4.5	<700		0.5	<10	6
1N4739A	9.1	28		<5.0	<700		0.5	<10	7
1N4740A	10	25		<7	<700		0.25	<10	7.6
1N4741A	11	23		<8	<700		0.25	<5	8.4
1N4742A	12	21		<9	<700		0.25	<5	9.1
1N4743A	13	19		<10	<700		0.25	<5	9.9
1N4744A	15	17		<14	<700		0.25	<5	11.4
1N4745A	16	15.5		<16	<700		0.25	<5	12.2
1N4746A	18	14		<20	<750		0.25	<5	13.7
1N4747A	20	12.5		<22	<750		0.25	<5	15.2
1N4748A	22	11.5		<23	<750		0.25	<5	16.7
1N4749A	24	10.5		<25	<750		0.25	<5	18.2
1N4750A	27	9.5		<35	<750		0.25	<5	20.6
1N4751A	30	8.5		<40	<1000		0.25	<5	22.8
1N4752A	33	7.5		<45	<1000		0.25	<5	25.1
1N4753A	36	7.0		<50	<1000		0.25	<5	27.4
1N4754A	39	6.5		<60	<1000		0.25	<5	29.7
1N4755A	43	6.0		<70	<1500		0.25	<5	32.7
1N4756A	47	5.5		<80	<1500		0.25	<5	35.8
1N4757A	51	5.0		<95	<1500		0.25	<5	38.8
1N4758A	56	4.5		<110	<2000		0.25	<5	42.6
1N4759A	62	4.0		<125	<2000		0.25	<5	47.1
1N4760A	68	3.7		<150	<2000		0.25	<5	51.7
1N4761A	75	3.3		<175	<2000		0.25	<5	56

- 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  
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