

# Zener Diode

## 1N5931B-1N5946B



### Features:

- Lower profile package.
- Excellent clamping capability.
- Glass passivated junction.
- $V_z$ -tolerance  $\pm 5\%$ .



### Applications:

Voltage stabilization.

### Absolute Maximum Ratings $T_j = 25^\circ\text{C}$

Parameter	Test Conditions	Symbol	Value	Unit
Power dissipation	$T_{\text{amb}} \geq 50^\circ\text{C}$	$P_V$	3	W
Z-current		$I_Z$	$P_V/V_Z$	mA
Junction temperature		$T_j$	150	°C
Storage temperature range		$T_{\text{stg}}$	-55 to +175	

Stresses exceeding maximum ratings may damage the device. Maximum ratings are stress ratings only. Functional above the recommended operating conditions is not implied. Extended exposure to stresses above the recommended operating conditions may affect device reliability.

### Electrical Characteristics $T_j = 25^\circ\text{C}$

Parameter	Test Conditions	Symbol	Maximum	Unit
Forward voltage	$I_F = 200\text{mA}$	$V_F$	1.5	V

### Specification Table

Description	$V_{Z\text{nom}}^{1)}$	$I_{ZT}$ for $r_{ZJT}$		$r_{Zjk}$ at $I_{ZK}$		$I_R$ at $V_R$		Part Number
	V	mA	$\Omega$	$\Omega$	mA	$\mu\text{A}$	V	
Zener Diode	5.6	66.9	< 2	< 250	1	< 5	3	1N5919B
Zener Diode	6.2	60.5		< 200			4	1N5920B
Zener Diode	6.8	55.1	< 2.5	5.2			1N5921B	
Zener Diode	10	37.5	< 4.5	< 500			8	1N5925B
Zener Diode	12	31.2	< 6.5	< 550	0.25	< 1	9.1	1N5927B
Zener Diode	15	25	< 9	< 600			11.4	1N5929B
Zener Diode	18	20.8	< 12	< 650			13.7	1N5931B
Zener Diode	20	18.7	< 14				15.2	1N5932B
Zener Diode	24	15.6	< 19				< 700	18.2

<sup>1)</sup> Based on DC-measurement at thermal equilibrium while maintaining the lead temperature ( $T_L$ ) at  $30^\circ\text{C}$ , 9.5mm (3/8 inches) from the diode body.

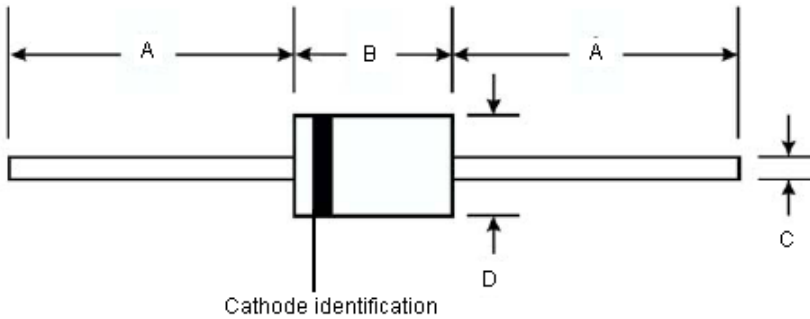


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### Dimensions in mm



Dimensions	Dimensions			
	Inches		mm	
	Min	Max	Min	Max
A	1	-	25.4	-
B	0.23	0.3	5.8	7.6
C	0.026	0.034	0.7	0.9
D	0.104	0.14	2.6	3.6

Case : Moulded plastic DO-15.  
 Polarity : Cathode band.  
 Marking : Type number.

### Marking



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