

Zener Diode

multicomp



**RoHS
Compliant**

Features

- Low 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	$T_{\text{amb}} \leq 75^\circ\text{C}$	P_v	5	W
Z-current	-	I_z	P_v / V_z	mA
Junction temperature	-	T_j	150	$^\circ\text{C}$
Storage temperature range	-	T_{stg}	-65 to +150	$^\circ\text{C}$

Stresses exceeding maximum ratings may damage the device. Maximum ratings are stress ratings only. Functional operation 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	Min.	Typ.	Max.	Unit
Forward voltage	$I_F = 1\text{A}$	V_F	-	-	1.2	V

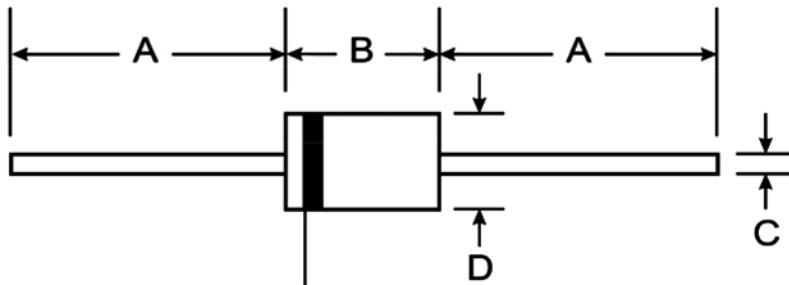
Part Number	$V_{z\text{nom}}$ 1)	I_z for Z_{ZT}		Z_{ZK} @ $I_{\text{ZK}} = 1\text{mA}$	I_R @ V_R		I_R 2)	ΔV_z 3)	I_{ZM} 4)
		V	mA	Ω	μA	V			
1N5343B	7.5	175	1.5	200	10	5.7	10.7	0.15	630

- 1) Zener voltage (V_z): Based on DC-measurement at thermal equilibrium while maintaining the lead temperature (T_L) at 25°C , 9.5mm (3/8") from the diode body.
- 2) Surge current (I_R) is specified as the maximum allowable peak, non-recurrent square-wave current with a plus width, PW, of 8.3ms.
- 3) Voltage regulation (ΔV_z): Test conditions for voltage regulation are as below, V_z measurements are made at 10% and then at 50% of the I_z max value listed in the electrical characteristics table. The test current time duration for each V_z measurements is $40 \pm 10\text{ms}$. ($T_A = 25^\circ\text{C} +8, -2^\circ\text{C}$)
- 4) Maximum regulator current (I_{ZM}): The maximum current shown is based on the maximum voltage of a 5% type unit; therefore, it applies only to the B-suffix device. The actual I_{ZM} for any device may not exceed the value of 5 watts divided by the actual V_z of the device. $T_L = 75^\circ\text{C}$ at 9.5mm (3/8") from the diode body.

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Dimensions



Dim.	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 : Molded plastic DO-201AE

Polarity : Cathode Band

Part Number Table

Description	Part Number
Zener Diode, 5W, 7.5V, DO-201AE	1N5343B

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