

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

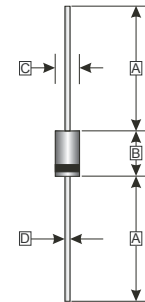
FEATURES

- Zener voltage range = 2.4V to 200V
- ESD rating of class 3 (>6 KV) per human body model
- Double slug type construction
- Metallurgical bonded construction
- Solder hot dip tin (Sn) lead finish

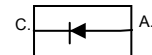
PACKAGING INFORMATION

- Case: DO-35
- Case Material: Double slug type, hermetically sealed glass
- Finish: All external surfaces are corrosion resistant and leads are readily solderable
- Polarity: Cathode indicated by polarity band
- Mounting: Any

DO-35



REF.	Millimeter	
	Min.	Max.
A	25.0	26.0
B	-	4.50
C	-	2.00
D	0.46	0.56



ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise specified)¹

Parameter	Symbol	Value	Unit
Maximum Steady State Power Dissipation @ TL ≤ 75°C, Lead Length = 3/8"	P _D	500	mW
Maximum Steady State Power Dissipation, Derate above 75°C	P _D	4.0	mW/°C
Operating and Storage Temperature Range	T _J , T _{STG}	-65~200	°C

Note:

1. Some part number series have lower JEDEC registered ratings.

ELECTRICAL RATINGS (T_A = 25°C unless otherwise specified)

Type Number ¹	Zener Voltage Range ²			Zener Impedance ³			Leakage Current ¹		θ _{vz} ⁴
	V _Z			Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK} =0.25mA	I _R @ V _R			
	Min(V)	Nom(V)	Max(V)	mA	Ω	μA	V	%/°C	
1N5221B	2.28	2.4	2.52	20	30	1200	100	1	-0.085
1N5222B	2.375	2.5	2.625	20	30	1250	100	1	-0.085
1N5223B	2.565	2.7	2.835	20	30	1300	75	1	-0.080
1N5224B	2.66	2.8	2.94	20	30	1400	75	1	-0.080
1N5225B	2.85	3.0	3.15	20	29	1600	50	1	-0.075
1N5226B	3.135	3.3	3.465	20	28	1600	25	1	-0.070
1N5227B	3.420	3.6	3.780	20	24	1700	15	1	-0.065
1N5228B	3.705	3.9	4.095	20	23	1900	10	1	-0.060
1N5229B	4.085	4.3	4.515	20	22	2000	5	1	±0.055
1N5230B	4.465	4.7	4.935	20	19	1900	5	2	±0.030
1N5231B	4.845	5.1	5.355	20	17	1600	5	2	±0.030
1N5232B	5.32	5.6	5.88	20	11	1600	5	3	+0.038
1N5233B	5.7	6.0	6.3	20	7	1600	5	3.5	+0.038
1N5234B	5.89	6.2	6.51	20	7	1000	5	4	+0.045
1N5235B	6.46	6.8	7.14	20	5	750	3	5	+0.050
1N5236B	7.125	7.5	7.875	20	6	500	3	6	+0.058
1N5237B	7.79	8.2	8.61	20	8	500	3	6.5	+0.062
1N5238B	8.265	8.7	9.135	20	8	600	3	6.5	+0.065
1N5239B	8.645	9.1	9.555	20	10	600	3	7	+0.068
1N5240B	9.5	10	10.5	20	17	600	3	8	+0.075
1N5241B	10.45	11	11.55	20	22	600	2	8.4	+0.076
1N5242B	11.4	12	12.6	20	30	600	1	9.1	+0.077
1N5243B	12.35	13	13.65	9.5	13	600	0.5	9.9	+0.079

ELECTRICAL RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Type Number ¹	Zener Voltage Range ²				Zener Impedance ³		Leakage Current ¹		θ_{vz} ⁴
	V_Z			I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK} = 0.25\text{mA}$	$I_R @ V_R$		
	Min(V)	Nom(V)	Max(V)	mA	Ω		μA	V	$\%/^\circ\text{C}$
1N5244B	13.3	14	14.7	9	15	600	0.1	10	+0.082
1N5245B	14.25	15	15.75	8.5	16	600	0.1	11	+0.082
1N5246B	15.2	16	16.8	7.8	17	600	0.1	12	+0.083
1N5247B	16.15	17	17.85	7.4	19	600	0.1	13	+0.084
1N5248B	17.1	18	18.9	7	21	600	0.1	14	+0.085
1N5249B	18.05	19	19.95	6.6	23	600	0.1	14	+0.086
1N5250B	19	20	21	6.2	25	600	0.1	15	+0.086
1N5251B	20.9	22	23.1	5.6	29	600	0.1	17	+0.087
1N5252B	22.8	24	25.2	5.2	33	600	0.1	18	+0.088
1N5253B	23.75	25	26.25	5	35	600	0.1	19	+0.089
1N5254B	25.65	27	28.35	4.6	41	600	0.1	21	+0.090
1N5255B	26.6	28	29.4	4.5	44	600	0.1	21	+0.091
1N5256B	28.5	30	31.5	4.2	49	600	0.1	23	+0.091
1N5257B	31.35	33	34.65	3.8	58	700	0.1	25	+0.092
1N5258B	34.2	36	37.8	3.4	70	700	0.1	27	+0.093
1N5259B	37.05	39	40.95	3.2	80	800	0.1	30	+0.094
1N5260B	40.85	43	45.15	3	93	800	0.1	33	+0.095
1N5261B	44.65	47	49.35	2.7	105	1000	0.1	36	+0.095
1N5262B	48.45	51	53.55	2.5	125	1100	0.1	39	+0.096
1N5263B	53.2	56	58.8	2.2	150	1300	0.1	43	+0.096

$V_F = 1.1\text{V Max @ } I_F = 200\text{mA}$ for 60V below types, $V_F = 1.4\text{V Max @ } I_F = 200\text{mA}$ for 60V above types

Notes:

- TOLERANCE AND TYPE NUMBER DESIGNATION (V_Z)**
The type numbers listed have a standard tolerance on the nominal zener voltage of $\pm 5\%$.
- ZENER VOLTAGE (V_Z) MEASUREMENT**
The zener voltage (V_Z) is tested under pulse condition. The measured V_Z is guaranteed to be within specification with device junction in thermal equilibrium.
- ZENER IMPEDANCE (V_Z) DERIVATION**
 Z_{ZT} and Z_{ZK} are measured by dividing the AC voltage drop across the device by the AC current applied. The specified limits are for $I_{Z(AC)} = 0.1 I_{Z(DC)}$ with AC frequency = 60Hz.
- TEMPERATURE COEFFICIENT(θ_{vz})**
Test conditions for temperature coefficient are as follows:
 A. $I_{ZT} = 7.5\text{mA}$, $T_1 = 25^\circ\text{C}$, $T_2 = 125^\circ\text{C}$ (1N5221B through 1N5242B)
 B. $I_{ZT} = \text{Rated } I_{ZT}$, $T_1 = 25^\circ\text{C}$, $T_2 = 125^\circ\text{C}$ (1N5243B through 1N5281B)
 Device to be temperature stabilized with current applied prior to reading breakdown voltage at the specified ambient temperature.