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|-----------------------------|---|
| SOLICON ZENER DIODES | REVERSE VOLTAGE - 2.4 to 68 Volts POWER - 500 mWatts |
|-----------------------------|---|

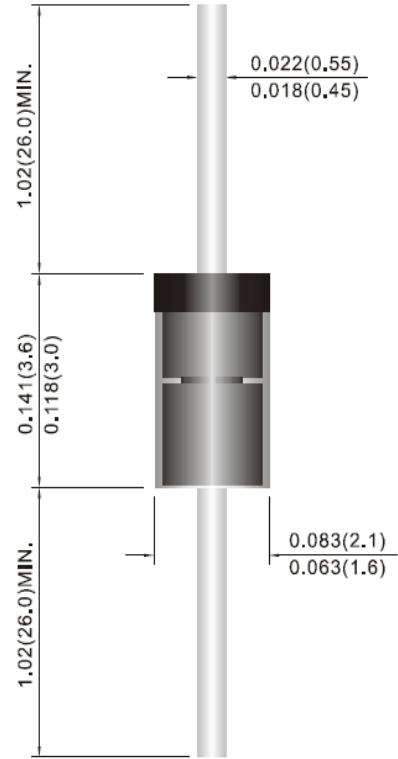
FEATURES

- Planar die construction
- 500mW power dissipation
- Ideally suited for automated assembly processes
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: Molded Glass DO-35
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram below
- Weight: 0.13 grams
- Ordering information: Suffix: "-35" to order DO-35 package
- Packing information
 - B-2K per bulk box
 - T/R-10K per 15 plastic reel
 - T/B-5K per horiz tape & ammo box

DO-35



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

| Parameter | Symbol | Value | Units |
|---|-----------|-------------|------------------|
| Power Dissipation at $T_A = 25^\circ\text{C}$ | P_{TOT} | 500 | mW |
| Junction Temperature | T_J | 175 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | -65 to +175 | $^\circ\text{C}$ |

Valid provided that leads that leads at a distance of 8mm case are kept at ambient temperature.

| Parameter | Symbol | Min | Typ | Max | Units |
|--|-----------------|-----|-----|------|----------------------------|
| Thermal Resistance Junction to Ambient Air | $R_{\theta JA}$ | --- | --- | 0.3* | $^\circ\text{C}/\text{mW}$ |
| Forward Voltage at $I_F = 200\text{mA}$ | V_F | --- | --- | 1.1 | V |

Valid provided that leads at a distance of 10mm from case are kept at ambient at temperature.

1N5221B thru 1N5266B



| Part Number | Zener Voltage Range | | | Max .Zener Impedance | | | | Maximum Reverse Leakage Current | | Making code |
|----------------|---------------------|-------------|-------------|----------------------|-----------|------------|-------------|---------------------------------|----------|----------------|
| | Vz @ IzT | | | ZzT @ IzT | | Zzk @ Izk | | IR @ VR | | |
| | Nom.V | Min.V | Max.V | Ω | mA | Ω | mA | μA | V | |
| 1N5221B | 2.4 | 2.28 | 2.52 | 30 | 20 | 1200 | 0.25 | 100 | 1 | 1N5221B |
| 1N5222B | 2.5 | 2.38 | 2.63 | 30 | 20 | 1250 | 0.25 | 100 | 1 | 1N5222B |
| 1N5223B | 2.7 | 2.57 | 2.84 | 30 | 20 | 1300 | 0.25 | 75 | 1 | 1N5223B |
| 1N5224B | 2.8 | 2.66 | 2.94 | 30 | 20 | 1400 | 0.25 | 75 | 1 | 1N5224B |
| 1N5225B | 3 | 2.85 | 3.15 | 29 | 20 | 1600 | 0.25 | 50 | 1 | 1N5225B |
| 1N5226B | 3.3 | 3.14 | 3.47 | 28 | 20 | 1600 | 0.25 | 25 | 1 | 1N5226B |
| 1N5227B | 3.6 | 3.42 | 3.78 | 24 | 20 | 1700 | 0.25 | 15 | 1 | 1N5227B |
| 1N5228B | 3.9 | 3.71 | 4.1 | 23 | 20 | 1900 | 0.25 | 10 | 1 | 1N5228B |
| 1N5229B | 4.3 | 4.09 | 4.52 | 22 | 20 | 2000 | 0.25 | 5 | 1 | 1N5229B |
| 1N5230B | 4.7 | 4.47 | 4.94 | 19 | 20 | 1900 | 0.25 | 5 | 2 | 1N5230B |
| 1N5231B | 5.1 | 4.85 | 5.36 | 17 | 20 | 1600 | 0.25 | 5 | 2 | 1N5231B |
| 1N5232B | 5.6 | 5.32 | 5.88 | 11 | 20 | 1600 | 0.25 | 5 | 3 | 1N5232B |
| 1N5233B | 6.0 | 5.7 | 6.3 | 7 | 20 | 1600 | 0.25 | 5 | 3.5 | 1N5233B |
| 1N5234B | 6.2 | 5.89 | 6.51 | 7 | 20 | 1000 | 0.25 | 5 | 4 | 1N5234B |
| 1N5235B | 6.8 | 6.46 | 7.14 | 5 | 20 | 750 | 0.25 | 3 | 5 | 1N5235B |
| 1N5236B | 7.5 | 7.13 | 7.88 | 6 | 20 | 500 | 0.25 | 3 | 6 | 1N5236B |
| 1N5237B | 8.2 | 7.79 | 8.61 | 8 | 20 | 500 | 0.25 | 3 | 6.5 | 1N5237B |
| 1N5238B | 8.7 | 8.27 | 9.14 | 8 | 20 | 600 | 0.25 | 3 | 6.5 | 1N5238B |
| 1N5239B | 9.1 | 8.65 | 9.56 | 10 | 20 | 600 | 0.25 | 3 | 7 | 1N5239B |
| 1N5240B | 10 | 9.5 | 10.5 | 17 | 20 | 600 | 0.25 | 3 | 8 | 1N5240B |
| 1N5241B | 11 | 10.45 | 11.55 | 22 | 20 | 600 | 0.25 | 2 | 8.4 | 1N5241B |
| 1N5242B | 12 | 11.4 | 12.6 | 30 | 20 | 600 | 0.25 | 1 | 9.1 | 1N5242B |
| 1N5243B | 13 | 12.35 | 13.65 | 13 | 9.5 | 600 | 0.25 | 0.5 | 9.9 | 1N5243B |
| 1N5244B | 14 | 13.3 | 14.7 | 15 | 9 | 600 | 0.25 | 0.1 | 10 | 1N5244B |
| 1N5245B | 15 | 14.25 | 15.75 | 16 | 8.5 | 600 | 0.25 | 0.1 | 11 | 1N5245B |
| 1N5246B | 16 | 15.2 | 16.8 | 17 | 7.8 | 600 | 0.25 | 0.1 | 12 | 1N5246B |
| 1N5247B | 17 | 16.15 | 17.85 | 19 | 7.4 | 600 | 0.25 | 0.1 | 13 | 1N5247B |
| 1N5248B | 18 | 17.1 | 18.9 | 21 | 7 | 600 | 0.25 | 0.1 | 14 | 1N5248B |
| 1N5249B | 19 | 18.05 | 19.95 | 23 | 6.6 | 600 | 0.25 | 0.1 | 14 | 1N5249B |
| 1N5250B | 20 | 19 | 21 | 25 | 6.2 | 600 | 0.25 | 0.1 | 15 | 1N5250B |
| 1N5251B | 22 | 20.9 | 23.1 | 29 | 5.6 | 600 | 0.25 | 0.1 | 17 | 1N5251B |
| 1N5252B | 24 | 22.8 | 25.2 | 33 | 5.2 | 600 | 0.25 | 0.1 | 18 | 1N5252B |
| 1N5253B | 25 | 23.75 | 26.25 | 35 | 5 | 600 | 0.25 | 0.1 | 19 | 1N5253B |
| 1N5254B | 27 | 25.65 | 28.35 | 41 | 4.6 | 600 | 0.25 | 0.1 | 21 | 1N5254B |
| 1N5255B | 28 | 26.6 | 29.4 | 44 | 4.5 | 600 | 0.25 | 0.1 | 21 | 1N5255B |
| 1N5256B | 30 | 28.5 | 31.5 | 49 | 4.2 | 600 | 0.25 | 0.1 | 23 | 1N5256B |
| 1N5257B | 33 | 31.35 | 34.65 | 58 | 3.8 | 700 | 0.25 | 0.1 | 25 | 1N5257B |
| 1N5258B | 36 | 34.2 | 37.8 | 70 | 3.4 | 700 | 0.25 | 0.1 | 27 | 1N5258B |
| 1N5259B | 39 | 37.05 | 40.95 | 80 | 3.2 | 800 | 0.25 | 0.1 | 30 | 1N5259B |
| 1N5260B | 43 | 40.85 | 45.15 | 93 | 3 | 900 | 0.25 | 0.1 | 33 | 1N5260B |
| 1N5261B | 47 | 44.65 | 49.35 | 150 | 2.7 | 1000 | 0.25 | 0.1 | 36 | 1N5261B |
| 1N5262B | 51 | 48.45 | 53.55 | 125 | 2.5 | 1100 | 0.25 | 0.1 | 39 | 1N5262B |
| 1N5263B | 56 | 53.2 | 58.8 | 150 | 2.2 | 1300 | 0.25 | 0.1 | 43 | 1N5263B |
| 1N5264B | 60 | 57 | 63 | 170 | 2.1 | 1400 | 0.25 | 0.1 | 46 | 1N5264B |
| 1N5265B | 62 | 58.9 | 65.1 | 185 | 2 | 1400 | 0.25 | 0.1 | 47 | 1N5265B |
| 1N5266B | 68 | 64.6 | 71.4 | 230 | 1.8 | 1600 | 0.25 | 0.1 | 52 | 1N5266B |

STANDARD VOLTAGE TOLERANCE IS +5%AND:

SUFFIX:A"FOR+3%

SUFFIX:B"FOR+5%

SUFFIX:C"FOR+10%

SUFFIX:D"FOR+20%

*MEASURED WITH PULSES Tp=40mSec

ZENER DIOE NUMERING SYSTEM:

1N5225B B

1* 2*

1*TYPE NO

2*TOLERANCE OF VZ

3*e.g.,1N5225B=3.0V+5%

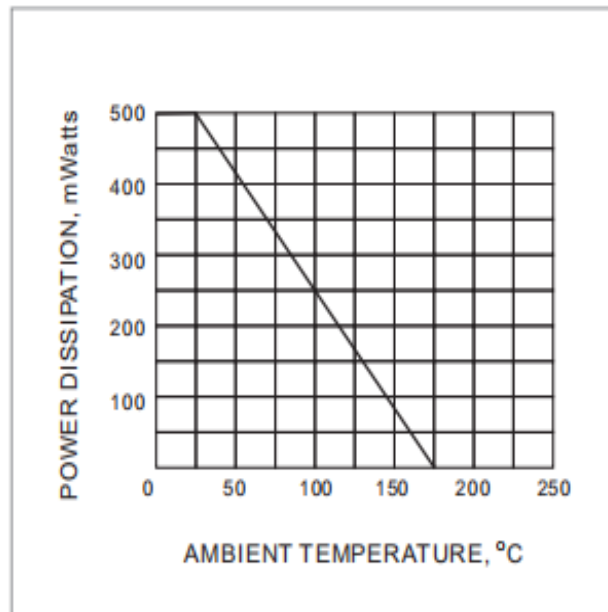


FIG. 1 POWER DERATING CURVE

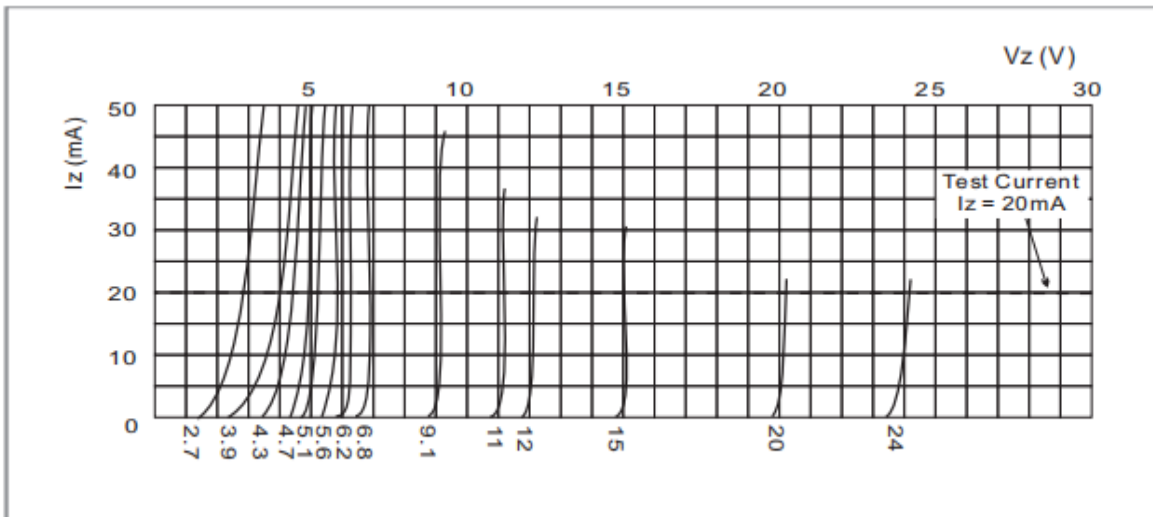


Fig.2 BREAKDOWN CHARACTERISTICS

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