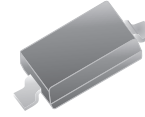


CZRV5223B-G Thru. CZRV5256B-G

Voltage: 2.7 to 30 Volts

Power: 200 mWatts

RoHS Device

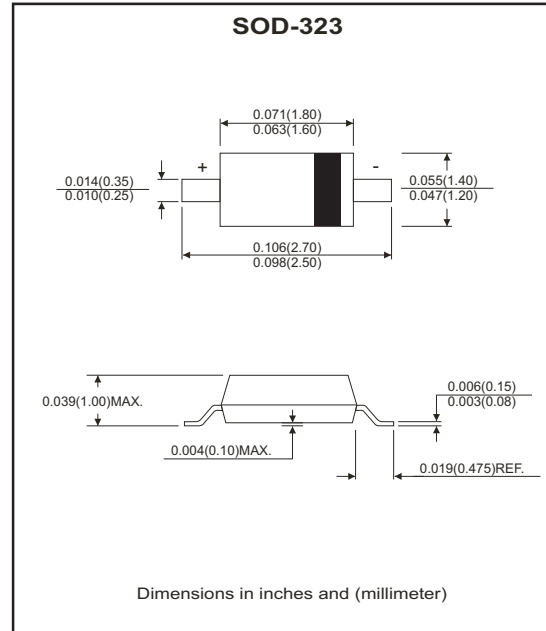


Features

- For surface mounted applications.
- 200mW Power Dissipation.
- Ideally suited for automated assembly processes.
- Pb free product.

Mechanical data

- Case: SOD-323, Molded plastic.
- Terminals: Solder Plated, solderable per MIL-STD-750, method 2026.
- Polarity: Cathode band.
- Weight: 0.008 gram (approx.).



Maximum Rating AND Electrical Characteristics

| Parameter | Symbol | Value | Unit |
|--|-----------------------------------|-------------|------|
| Forward Voltage (Note 2) @ I _F = 10mA | V _F | 0.9 | V |
| Power Dissipation (Note 1) | P _d | 200 | mW |
| Thermal Resistance, Junction to Ambient Air | R _{θJA} | 625 | °C/W |
| Operating Junction and Storage Temperature Range | T _J , T _{STG} | -65 to +150 | °C |

Notes: 1. Device mounted on ceramic PCBs; 7.6mm*9.4mm*0.87mm with pad areas 25mm²

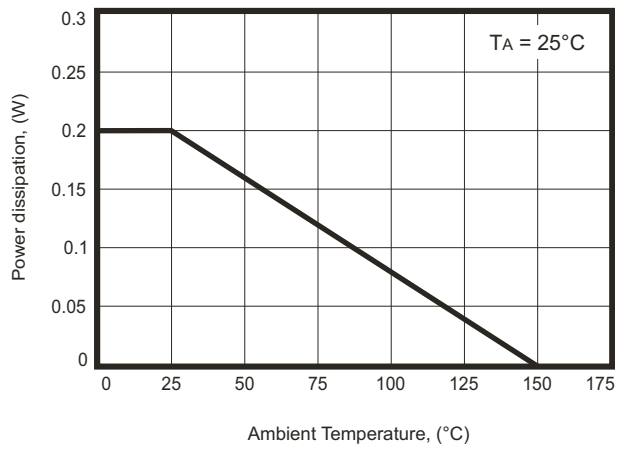
2. Tested with pulses, T_p ≤ 1.0ms.

Electrical Characteristics(@Ta = 25°C unless otherwise specified)

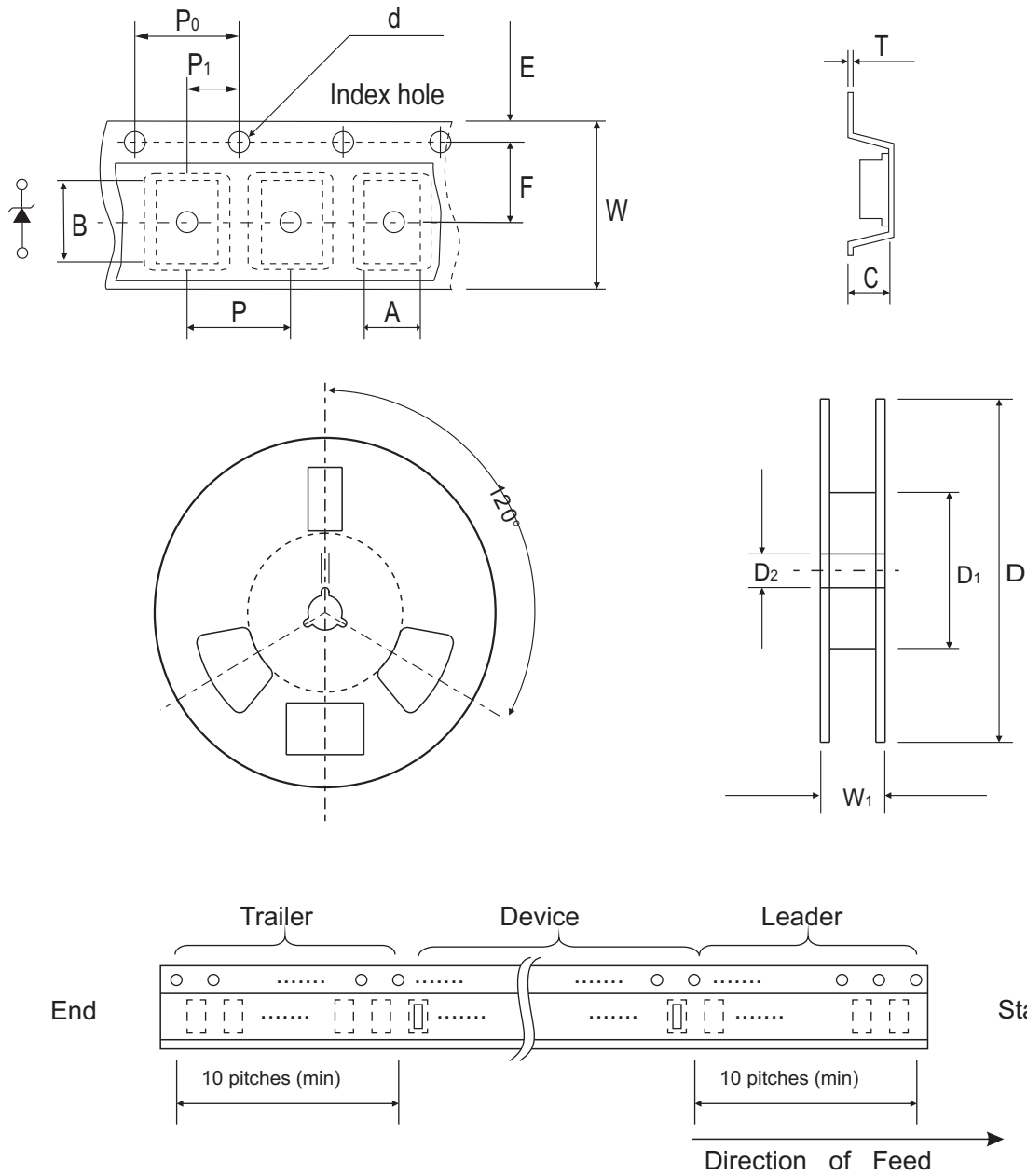
| Part Number | Zener Voltage | | | Operating resistance | | Rising operating resistance | | Reverse current | | Marking Code |
|-------------|---------------|-----|-------|----------------------|---------|-----------------------------|---------|-----------------|-------|--------------|
| | Vz(V)@IzT | | | ZzT(Ohm) | | Zzk(Ohm) | | IR(uA) | | |
| | Min | Nom | Max | Max | IzT(mA) | Max | Izk(mA) | Max | VR(V) | |
| CZRV5223B-G | 2.57 | 2.7 | 2.84 | 30 | 20 | 1300 | 0.25 | 75 | 1.0 | C3 |
| CZRV5225B-G | 2.85 | 3.0 | 3.15 | 30 | 20 | 1600 | 0.25 | 50 | 1.0 | C5 |
| CZRV5226B-G | 3.14 | 3.3 | 3.47 | 28 | 20 | 1600 | 0.25 | 25 | 1.0 | G1 |
| CZRV5227B-G | 3.42 | 3.6 | 3.78 | 24 | 20 | 1700 | 0.25 | 15 | 1.0 | G2 |
| CZRV5228B-G | 3.71 | 3.9 | 4.10 | 23 | 20 | 1900 | 0.25 | 10 | 1.0 | G3 |
| CZRV5229B-G | 4.09 | 4.3 | 4.52 | 22 | 20 | 2000 | 0.25 | 5.0 | 1.0 | G4 |
| CZRV5230B-G | 4.47 | 4.7 | 4.94 | 19 | 20 | 1900 | 0.25 | 5.0 | 2.0 | G5 |
| CZRV5231B-G | 4.85 | 5.1 | 5.36 | 17 | 20 | 1600 | 0.25 | 5.0 | 2.0 | E1 |
| CZRV5232B-G | 5.32 | 5.6 | 5.88 | 11 | 20 | 1600 | 0.25 | 5.0 | 3.0 | E2 |
| CZRV5233B-G | 5.70 | 6.0 | 6.30 | 7 | 20 | 1600 | 0.25 | 5.0 | 3.5 | E3 |
| CZRV5234B-G | 5.89 | 6.2 | 6.51 | 7 | 20 | 1000 | 0.25 | 5.0 | 4.0 | E4 |
| CZRV5235B-G | 6.46 | 6.8 | 7.14 | 5 | 20 | 750 | 0.25 | 3.0 | 5.0 | E5 |
| CZRV5236B-G | 7.13 | 7.5 | 7.88 | 6 | 20 | 500 | 0.25 | 3.0 | 6.0 | F1 |
| CZRV5237B-G | 7.79 | 8.2 | 8.61 | 8 | 20 | 500 | 0.25 | 3.0 | 6.5 | F2 |
| CZRV5238B-G | 8.27 | 8.7 | 9.14 | 8 | 20 | 600 | 0.25 | 3.0 | 6.5 | F3 |
| CZRV5239B-G | 8.65 | 9.1 | 9.56 | 10 | 20 | 600 | 0.25 | 3.0 | 7.0 | F4 |
| CZRV5240B-G | 9.50 | 10 | 10.50 | 17 | 20 | 600 | 0.25 | 3.0 | 8.0 | F5 |
| CZRV5241B-G | 10.45 | 11 | 11.55 | 22 | 20 | 600 | 0.25 | 2.0 | 8.4 | H1 |
| CZRV5242B-G | 11.40 | 12 | 12.60 | 30 | 20 | 600 | 0.25 | 1.0 | 9.1 | H2 |
| CZRV5243B-G | 12.35 | 13 | 13.65 | 13 | 9.5 | 600 | 0.25 | 0.5 | 9.9 | H3 |
| CZRV5244B-G | 13.30 | 14 | 14.70 | 15 | 9.0 | 600 | 0.25 | 0.1 | 10.0 | H4 |
| CZRV5245B-G | 14.25 | 15 | 15.75 | 16 | 8.5 | 600 | 0.25 | 0.1 | 11.0 | H5 |
| CZRV5246B-G | 15.20 | 16 | 16.80 | 17 | 7.8 | 600 | 0.25 | 0.1 | 12.0 | J1 |
| CZRV5248B-G | 17.10 | 18 | 18.90 | 21 | 7.0 | 600 | 0.25 | 0.1 | 14.0 | J3 |
| CZRV5250B-G | 19.00 | 20 | 21.00 | 25 | 6.2 | 600 | 0.25 | 0.1 | 15.0 | J5 |
| CZRV5251B-G | 20.90 | 22 | 23.10 | 29 | 5.6 | 600 | 0.25 | 0.1 | 17.0 | K1 |
| CZRV5252B-G | 22.80 | 24 | 25.20 | 33 | 5.2 | 600 | 0.25 | 0.1 | 18.0 | K2 |
| CZRV5253B-G | 23.75 | 25 | 26.25 | 35 | 5.0 | 600 | 0.25 | 0.1 | 19.0 | K3 |
| CZRV5254B-G | 25.65 | 27 | 28.35 | 41 | 5.0 | 600 | 0.25 | 0.1 | 21.0 | K4 |
| CZRV5255B-G | 26.60 | 28 | 29.40 | 44 | 4.5 | 600 | 0.25 | 0.1 | 21.0 | K5 |
| CZRV5256B-G | 28.50 | 30 | 31.50 | 49 | 4.2 | 600 | 0.25 | 0.1 | 23.0 | M1 |

RATING AND CHARACTERISTIC CURVES (CZRV5223B-G Thru CZRV5256B-G)

Fig.1- Power Derating VS Ambient Temperature



Reel Taping Specification



| SOD-323 | SYMBOL | A | B | C | d | D | D1 | D2 |
|---------|--------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | (mm) | 1.46 ± 0.10 | 2.90 ± 0.10 | 1.25 ± 0.10 | 1.50 ± 0.10 | 178 ± 1.00 | 54.40 ± 0.40 | 13.0 ± 0.20 |
| | (inch) | 0.058 ± 0.004 | 0.114 ± 0.004 | 0.049 ± 0.004 | 0.059 ± 0.004 | 7.008 ± 0.039 | 2.142 ± 0.016 | 0.512 ± 0.008 |

| SOD-323 | SYMBOL | E | F | P | P0 | P1 | W | W1 |
|---------|--------|---------------|---------------|---------------|---------------|---------------|-------------------------|---------------|
| | (mm) | 1.75 ± 0.10 | 3.50 ± 0.05 | 4.00 ± 0.10 | 4.00 ± 0.10 | 2.00 ± 0.10 | 8.00 + 0.30 / - 0.10 | 9.50 ± 1.00 |
| | (inch) | 0.069 ± 0.004 | 0.138 ± 0.002 | 0.158 ± 0.004 | 0.158 ± 0.004 | 0.079 ± 0.004 | 0.315 + 0.011 / - 0.004 | 0.374 ± 0.039 |