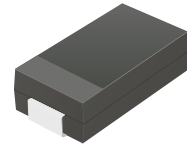


CZRC5340B-G Thru CZRC5388B-G

Voltage: 6.0 to 200 Volts

Power: 5 Watts

RoHS Device

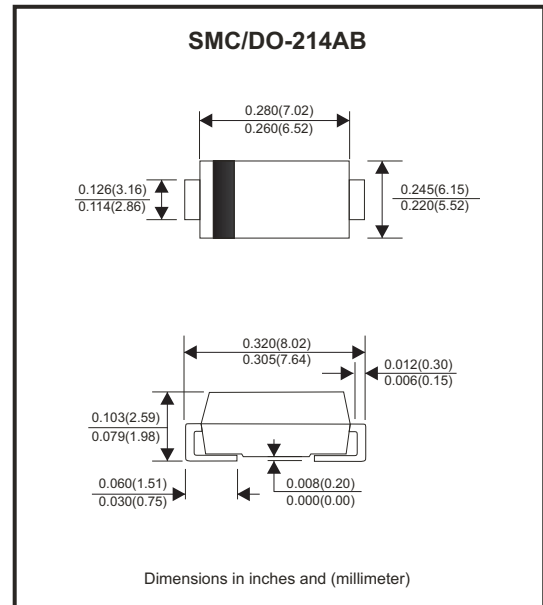


Features

- Glass passivated chip.
- Low leakage.
- Built-in strain relief.
- Low inductance.
- High peak reverse power dissipation.
- For use in stabilizing and clipping with high power rating.

Mechanical data

- Case: DO-214AB(SMC), Molded plastic.
- Epoxy: UL 94V-0 rate flame retardant.
- Terminals: Solderable per MIL-STD-750, method 2026 guaranteed.
- Polarity: Color band denotes cathode.
- Mounting position: Any.
- Weight: 0.21 grams(approx.).



Circuit diagram



Maximum Ratings (at TA=25°C unless otherwise specified)

| Parameter | Symbol | Value | Unit |
|---|------------------|-------------|------|
| DC power dissipation at T _L = 75°C (Note1) | P _D | 5 | W |
| Maximun forward voltage at I _F =1A | V _F | 1.2 | V |
| Junction temperature range | T _J | -55 to +150 | °C |
| Storage temperature range | T _{STG} | -55 to +150 | °C |

Note:

(1) T_L = Lead temperature at 3/8" (9.5mm) from body.

Electrical Characteristics (at TA=25°C unless otherwise specified)

| Part Number | Nominal Zener Voltage | | Maximum Zener Impedance | | | Maximum Reverse Leakage Current | | Maximum DC Zener Current | Marking Code |
|-------------|-----------------------|------|-------------------------|-----------|------|---------------------------------|------|--------------------------|--------------|
| | Vz @ IzT | IzT | ZzT @ IzT | Zzk @ Izk | Izk | Ir @ VR | | IzM | |
| | (V) | (mA) | (Ohm) | (Ohm) | (mA) | (uA) | (V) | (mA) | |
| CZRC5340B-G | 6.0 | 200 | 1.0 | 300 | 1 | 1.0 | 3.0 | 790.0 | 340B |
| CZRC5341B-G | 6.2 | 200 | 1.0 | 200 | 1 | 1.0 | 3.0 | 765.0 | 341B |
| CZRC5342B-G | 6.8 | 175 | 1.0 | 200 | 1 | 10.0 | 5.2 | 700.0 | 342B |
| CZRC5343B-G | 7.5 | 175 | 1.5 | 200 | 1 | 10.0 | 5.7 | 630.0 | 343B |
| CZRC5344B-G | 8.2 | 150 | 1.5 | 200 | 1 | 10.0 | 6.2 | 580.0 | 344B |
| CZRC5345B-G | 8.7 | 150 | 2.0 | 200 | 1 | 10.0 | 6.6 | 545.0 | 345B |
| CZRC5346B-G | 9.1 | 150 | 2.0 | 150 | 1 | 7.5 | 6.9 | 520.0 | 346B |
| CZRC5347B-G | 10.0 | 125 | 2.0 | 125 | 1 | 5.0 | 7.6 | 475.0 | 347B |
| CZRC5348B-G | 11.0 | 125 | 2.5 | 125 | 1 | 5.0 | 8.4 | 430.0 | 348B |
| CZRC5349B-G | 12.0 | 100 | 2.5 | 125 | 1 | 2.0 | 9.1 | 395.0 | 349B |
| CZRC5350B-G | 13.0 | 100 | 2.5 | 100 | 1 | 1.0 | 9.9 | 365.0 | 350B |
| CZRC5351B-G | 14.0 | 100 | 2.5 | 75 | 1 | 1.0 | 10.6 | 340.0 | 351B |
| CZRC5352B-G | 15.0 | 75 | 2.5 | 75 | 1 | 1.0 | 11.5 | 315.0 | 352B |
| CZRC5353B-G | 16.0 | 75 | 2.5 | 75 | 1 | 1.0 | 12.2 | 295.0 | 353B |
| CZRC5354B-G | 17.0 | 70 | 2.5 | 75 | 1 | 0.5 | 12.9 | 280.0 | 354B |
| CZRC5355B-G | 18.0 | 65 | 2.5 | 75 | 1 | 0.5 | 13.7 | 265.0 | 355B |
| CZRC5356B-G | 19.0 | 65 | 3.0 | 75 | 1 | 0.5 | 14.4 | 250.0 | 356B |
| CZRC5357B-G | 20.0 | 65 | 3.0 | 75 | 1 | 0.5 | 15.2 | 237.0 | 357B |
| CZRC5358B-G | 22.0 | 50 | 3.5 | 75 | 1 | 0.5 | 16.7 | 216.0 | 358B |
| CZRC5359B-G | 24.0 | 50 | 3.5 | 100 | 1 | 0.5 | 18.2 | 198.0 | 359B |
| CZRC5360B-G | 25.0 | 50 | 4.0 | 110 | 1 | 0.5 | 19.0 | 190.0 | 360B |
| CZRC5361B-G | 27.0 | 50 | 5.0 | 120 | 1 | 0.5 | 20.6 | 176.0 | 361B |
| CZRC5362B-G | 28.0 | 50 | 6.0 | 130 | 1 | 0.5 | 21.2 | 170.0 | 362B |
| CZRC5363B-G | 30.0 | 40 | 8.0 | 140 | 1 | 0.5 | 22.8 | 158.0 | 363B |
| CZRC5364B-G | 33.0 | 40 | 10.0 | 150 | 1 | 0.5 | 25.1 | 144.0 | 364B |
| CZRC5365B-G | 36.0 | 30 | 11.0 | 160 | 1 | 0.5 | 27.4 | 132.0 | 365B |
| CZRC5366B-G | 39.0 | 30 | 14.0 | 170 | 1 | 0.5 | 29.7 | 122.0 | 366B |
| CZRC5367B-G | 43.0 | 30 | 20.0 | 190 | 1 | 0.5 | 32.7 | 110.0 | 367B |
| CZRC5368B-G | 47.0 | 25 | 25.0 | 210 | 1 | 0.5 | 35.8 | 100.0 | 368B |
| CZRC5369B-G | 51.0 | 25 | 27.0 | 230 | 1 | 0.5 | 38.8 | 93.0 | 369B |
| CZRC5370B-G | 56.0 | 20 | 35.0 | 280 | 1 | 0.5 | 42.6 | 86.0 | 370B |
| CZRC5371B-G | 60.0 | 20 | 40.0 | 350 | 1 | 0.5 | 45.5 | 79.0 | 371B |
| CZRC5372B-G | 62.0 | 20 | 42.0 | 400 | 1 | 0.5 | 47.1 | 76.0 | 372B |
| CZRC5373B-G | 68.0 | 20 | 44.0 | 500 | 1 | 0.5 | 51.7 | 70.0 | 373B |
| CZRC5374B-G | 75.0 | 20 | 45.0 | 620 | 1 | 0.5 | 56.0 | 63.0 | 374B |
| CZRC5375B-G | 82.0 | 15 | 65.0 | 720 | 1 | 0.5 | 62.2 | 58.0 | 375B |
| CZRC5376B-G | 87.0 | 15 | 75.0 | 760 | 1 | 0.5 | 66.0 | 54.5 | 376B |
| CZRC5377B-G | 91.0 | 15 | 75.0 | 760 | 1 | 0.5 | 69.2 | 52.5 | 377B |

Notes:

- (1) The type number listed have a standard tolerance on the nominal zener voltage of $\pm 5\%$.
- (2) The reverse surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on IzT per JEDEC Method.

Electrical Characteristics (at TA=25°C unless otherwise specified)

| Part Number | Nominal Zener Voltage | | Maximum Zener Impedance | | | Maximum Reverse Leakage Current | | Maximum DC Zener Current | Marking Code |
|-------------|-----------------------|------|-------------------------|-----------|------|---------------------------------|-------|--------------------------|--------------|
| | Vz @ IZT | IZT | ZzT @ IZT | ZzK @ IZK | IZK | IR @ VR | | IZM | |
| | (V) | (mA) | (Ohm) | (Ohm) | (mA) | (uA) | (V) | (mA) | |
| CZRC5378B-G | 100.0 | 12 | 90.0 | 800 | 1 | 0.5 | 76.0 | 47.5 | 378B |
| CZRC5379B-G | 110.0 | 12 | 125.0 | 1000 | 1 | 0.5 | 83.6 | 43.0 | 379B |
| CZRC5380B-G | 120.0 | 10 | 170.0 | 1150 | 1 | 0.5 | 91.2 | 39.5 | 380B |
| CZRC5381B-G | 130.0 | 10 | 190.0 | 1250 | 1 | 0.5 | 98.8 | 36.6 | 381B |
| CZRC5382B-G | 140.0 | 8 | 230.0 | 1500 | 1 | 0.5 | 106.0 | 34.0 | 382B |
| CZRC5383B-G | 150.0 | 8 | 330.0 | 1500 | 1 | 0.5 | 114.0 | 31.6 | 383B |
| CZRC5384B-G | 160.0 | 8 | 335.0 | 1650 | 1 | 0.5 | 122.0 | 29.4 | 384B |
| CZRC5385B-G | 170.0 | 8 | 380.0 | 1750 | 1 | 0.5 | 129.0 | 28.0 | 385B |
| CZRC5386B-G | 180.0 | 5 | 430.0 | 1750 | 1 | 0.5 | 137.0 | 26.4 | 386B |
| CZRC5387B-G | 190.0 | 5 | 450.0 | 1850 | 1 | 0.5 | 144.0 | 25.0 | 387B |
| CZRC5388B-G | 200.0 | 5 | 480.0 | 1850 | 1 | 0.5 | 152.0 | 23.6 | 388B |

Notes:

- (1) The type number listed have a standard tolerance on the nominal zener voltage of $\pm 5\%$.
- (2) The reverse surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on IZT per JEDEC Method.

RATING AND CHARACTERISTIC CURVES (CZRC5340B-G Thru CZRC5388B-G)

Fig.1 - Power Temperature Derating Current

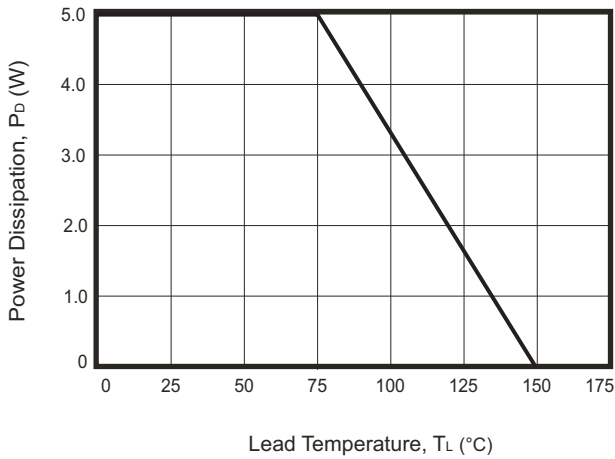


Fig.2 - Temperature Coefficients v.s. Zener Voltage

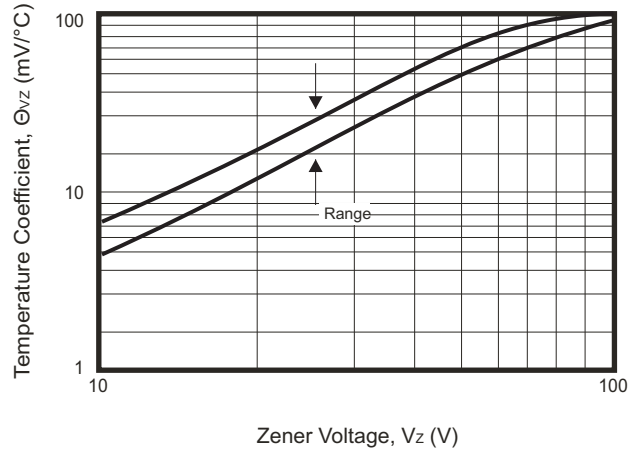


Fig.3 - Typical Thermal Resistance v.s. Lead Length

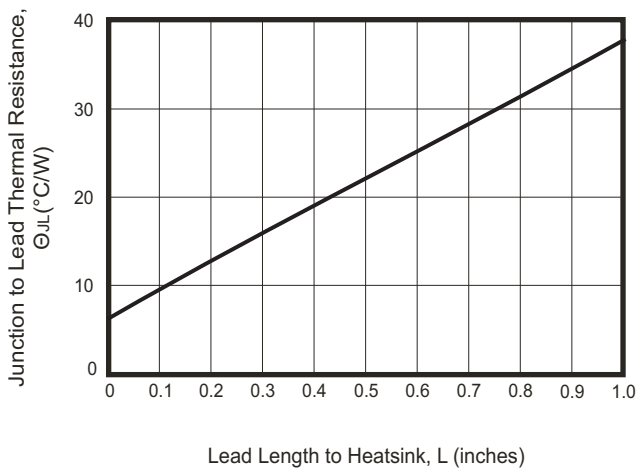


Fig.4 - Maximum Surge Power

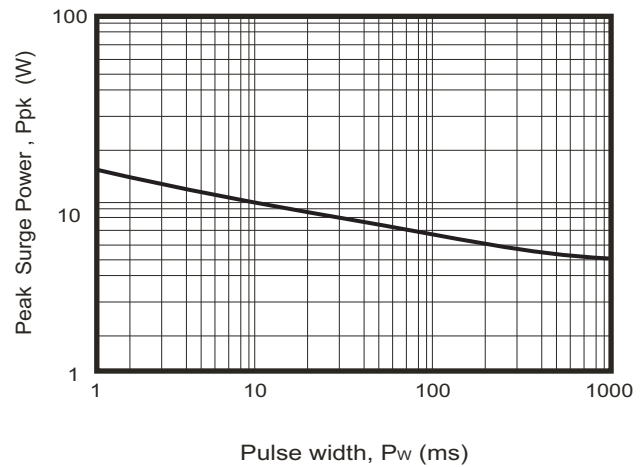
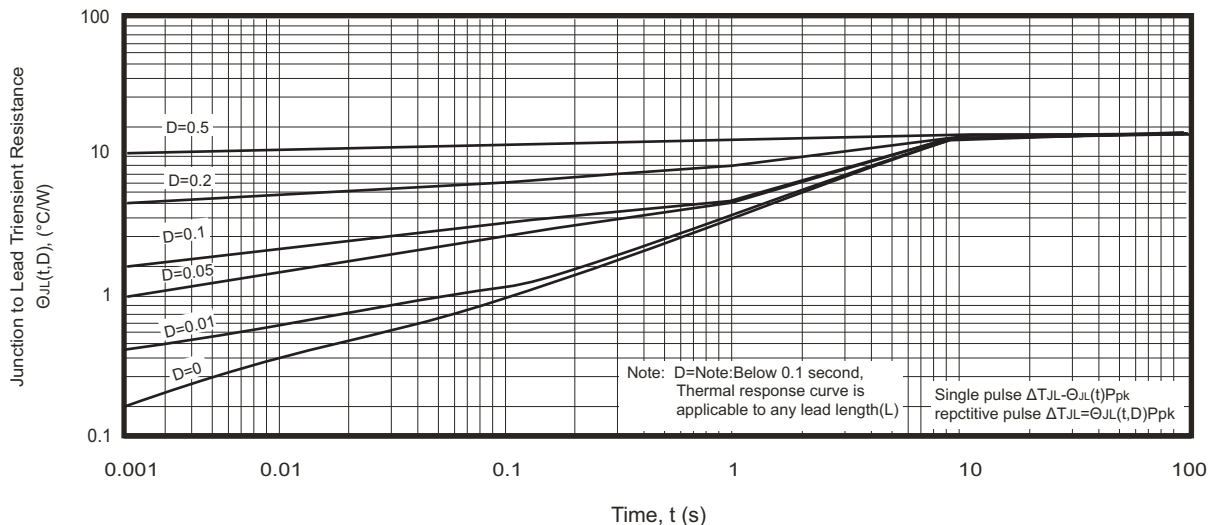
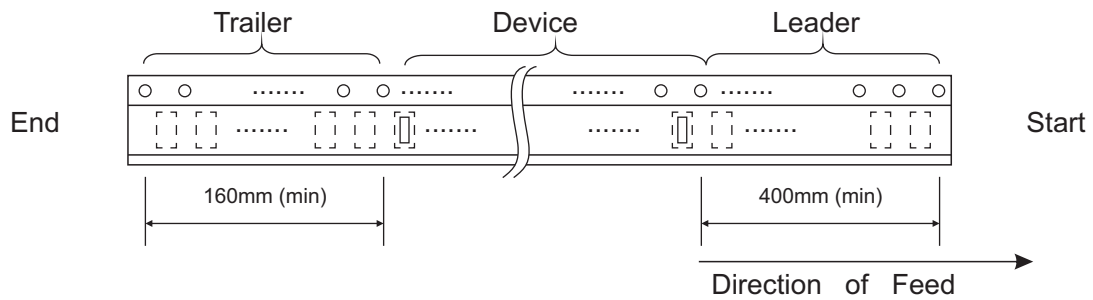
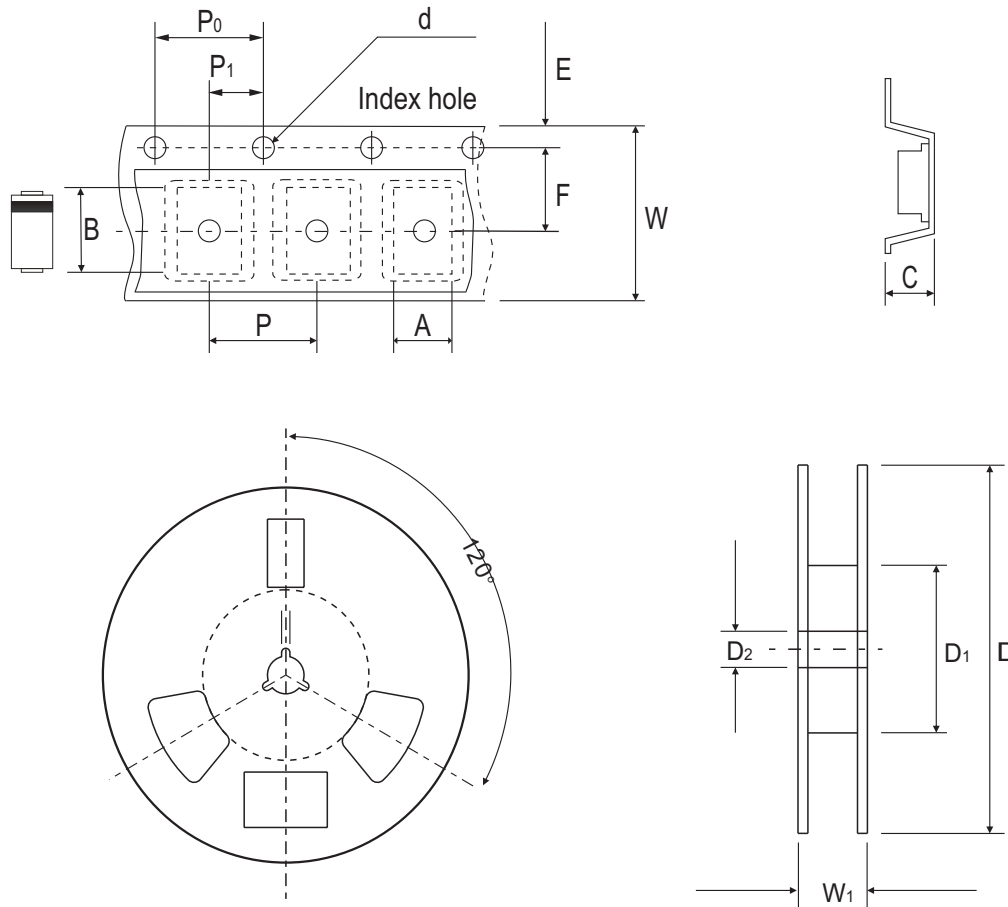


Fig.5 - Typical Thermal Response L , Lead Length=3/8 inch



Reel Taping Specification



| DO-214AB (SMC) | SYMBOL | A | B | C | d | D | D1 | D2 |
|-------------------|--------|---------------|---------------|---------------|---------------|---------------|-------------|---------------|
| | (mm) | 6.05 ± 0.10 | 8.31 ± 0.10 | 2.54 ± 0.10 | 1.55 ± 0.10 | 330.00 ± 2.00 | 50.00 (min) | 13.00 ± 0.20 |
| | (inch) | 0.238 ± 0.004 | 0.327 ± 0.004 | 0.100 ± 0.004 | 0.061 ± 0.004 | 12.99 ± 0.079 | 1.969 (min) | 0.512 ± 0.008 |

| DO-214AB (SMC) | SYMBOL | E | F | P | P0 | P1 | W | W1 |
|-------------------|--------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|
| | (mm) | 1.75 ± 0.10 | 7.50 ± 0.10 | 8.00 ± 0.10 | 4.00 ± 0.10 | 2.00 ± 0.10 | 16.00 ± 0.30 | 22.40 (max) |
| | (inch) | 0.069 ± 0.004 | 0.295 ± 0.004 | 0.315 ± 0.004 | 0.157 ± 0.004 | 0.079 ± 0.004 | 0.630 ± 0.012 | 0.882 (max) |