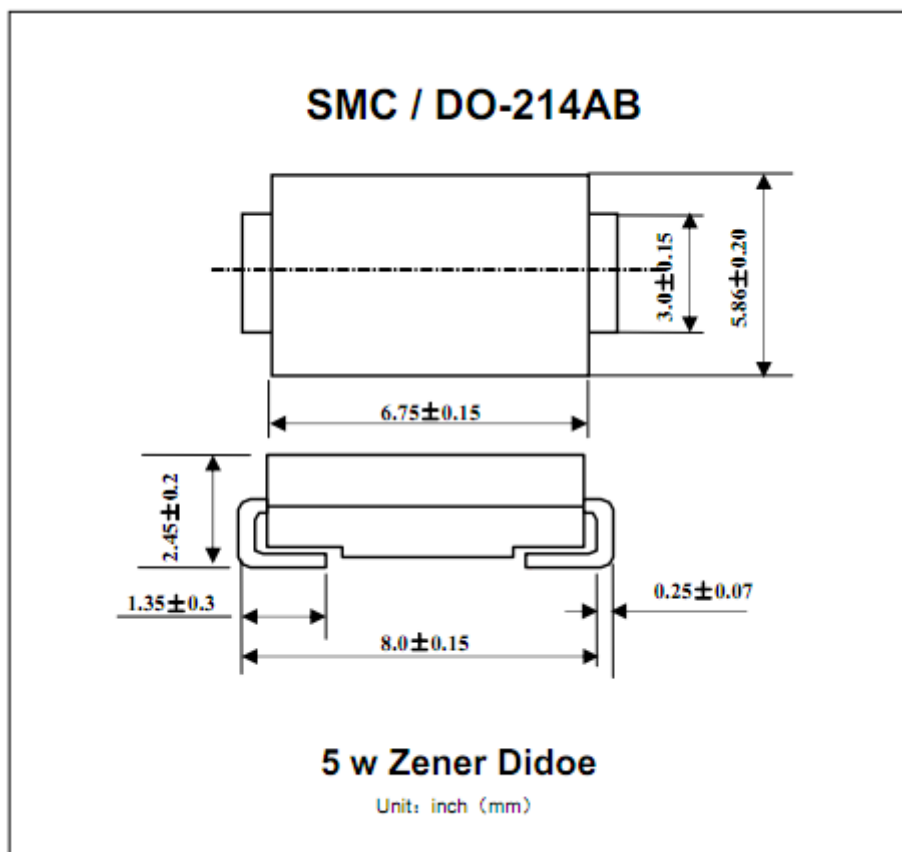




Feature

- P_t 5W
- V_z 3.3V-200V

Outline Dimensions



Limiting Values (Absolute Maximum Rating, $T_a=25^\circ\text{C}$ Unless otherwise specified)

| Item | Symbol | Limit | Unit |
|---|-----------------|-----------|---------------------------|
| Zener Current | I_z MAX | See Table | mA |
| Power dissipation @ $T_L=75^\circ\text{C}$ (Note 1) | P_t | 5 | W |
| Forward voltage @ $I_F = 200$ mA | V_F | 1.2 | V |
| Thermal Resistance (Between junction and ambient , Note1) | R_θ (ja) | 28 | $^\circ\text{C}/\text{W}$ |
| Junction temperature / Storage temperature range | T_J, T_{STG} | -55~+150 | $^\circ\text{C}$ |
| Notes 1. T_a -- With 5*5mm copper heatsink | | | |

SMC5333B THRU SMC5388B

■ 电性参数 (T_A=25°C 除非另有规定)

| Type (Note1) | Zener voltage V Z@IZT | IZT | Z ZT @IZT | Z ZK @IZK | I ZK | IR@VR | VR | @V(BR) I ZM @ 50°C (Note3) |
|--------------|--------------------------|-----|-----------|-----------|------|-------|------|--------------------------------------|
| | V | mA | Ω | Ω | mA | μA | V | mA |
| SMC5333B | 3.3 | 380 | 3 | 400 | 1 | 300 | 1.0 | 1440 |
| SMC5334B | 3.6 | 350 | 2.5 | 500 | 1 | 150 | 1.0 | 1320 |
| SMC5335B | 3.9 | 320 | 2 | 500 | 1 | 50 | 1.0 | 1220 |
| SMC5336B | 4.3 | 290 | 2 | 500 | 1 | 10 | 1.0 | 1100 |
| SMC5337B | 4.7 | 260 | 2 | 450 | 1 | 5 | 1.0 | 1010 |
| SMC5338B | 5.1 | 240 | 1.5 | 400 | 1 | 1 | 1.0 | 930 |
| SMC5339B | 5.6 | 220 | 1 | 400 | 1 | 1 | 2.0 | 856 |
| SMC5340B | 6.0 | 200 | 1 | 300 | 1 | 1 | 3.0 | 790 |
| SMC5341B | 6.2 | 200 | 1 | 200 | 1 | 1 | 4.0 | 765 |
| SMC5342B | 6.8 | 175 | 1 | 200 | 1 | 10 | 4.9 | 700 |
| SMC5343B | 7.5 | 175 | 1.5 | 200 | 1 | 10 | 5.4 | 630 |
| SMC5344B | 8.2 | 150 | 1.5 | 200 | 1 | 10 | 5.9 | 580 |
| SMC5345B | 8.7 | 150 | 2 | 200 | 1 | 10 | 6.3 | 545 |
| SMC5346B | 9.1 | 150 | 2 | 150 | 1 | 7.5 | 6.6 | 520 |
| SMC5347B | 10 | 125 | 2 | 125 | 1 | 5 | 7.2 | 475 |
| SMC5348B | 11 | 125 | 2.5 | 125 | 1 | 5 | 8 | 430 |
| SMC5349B | 12 | 100 | 2.5 | 125 | 1 | 2 | 8.6 | 395 |
| SMC5350B | 13 | 100 | 2.5 | 100 | 1 | 1 | 9.4 | 365 |
| SMC5351B | 14 | 100 | 2.5 | 75 | 1 | 1 | 10.1 | 340 |
| SMC5352B | 15 | 75 | 2.5 | 75 | 1 | 1 | 10.8 | 315 |
| SMC5353B | 16 | 75 | 2.5 | 75 | 1 | 1 | 11.5 | 295 |
| SMC5354B | 17 | 70 | 2.5 | 75 | 1 | 0.5 | 12.2 | 280 |
| SMC5355B | 18 | 65 | 2.5 | 75 | 1 | 0.5 | 13 | 265 |
| SMC5356B | 19 | 65 | 3 | 75 | 1 | 0.5 | 13.7 | 250 |
| SMC5357B | 20 | 50 | 3 | 75 | 1 | 0.5 | 14.4 | 237 |
| SMC5358B | 22 | 50 | 3.5 | 75 | 1 | 0.5 | 15.8 | 216 |
| SMC5359B | 24 | 50 | 3.5 | 100 | 1 | 0.5 | 17.3 | 198 |
| SMC5360B | 25 | 50 | 4 | 110 | 1 | 0.5 | 18 | 190 |
| SMC5361B | 27 | 50 | 5 | 120 | 1 | 0.5 | 19.4 | 176 |
| SMC5362B | 28 | 50 | 6 | 130 | 1 | 0.5 | 20.1 | 170 |
| SMC5363B | 30 | 40 | 8 | 140 | 1 | 0.5 | 21.6 | 158 |
| SMC5364B | 33 | 40 | 10 | 150 | 1 | 0.5 | 23.8 | 144 |
| SMC5365B | 36 | 30 | 11 | 160 | 1 | 0.5 | 25.9 | 132 |
| SMC5366B | 39 | 30 | 14 | 170 | 1 | 0.5 | 28.1 | 122 |
| SMC5367B | 43 | 30 | 20 | 190 | 1 | 0.5 | 31 | 110 |
| SMC5368B | 47 | 25 | 25 | 210 | 1 | 0.5 | 33.8 | 100 |
| SMC5369B | 51 | 25 | 27 | 230 | 1 | 0.5 | 36.7 | 93 |
| SMC5370B | 56 | 20 | 35 | 280 | 1 | 0.5 | 40.3 | 86 |
| SMC5371B | 60 | 20 | 40 | 350 | 1 | 0.5 | 43 | 79 |
| SMC5372B | 62 | 20 | 42 | 400 | 1 | 0.5 | 44.6 | 76 |
| SMC5373B | 68 | 20 | 44 | 500 | 1 | 0.5 | 49 | 70 |
| SMC5374B | 75 | 20 | 45 | 620 | 1 | 0.5 | 54 | 63 |
| SMC5375B | 82 | 15 | 65 | 720 | 1 | 0.5 | 59 | 58 |
| SMC5376B | 87 | 15 | 75 | 760 | 1 | 0.5 | 63 | 54.5 |
| SMC5377B | 91 | 15 | 75 | 760 | 1 | 0.5 | 65.5 | 52.5 |
| SMC5378B | 100 | 12 | 90 | 800 | 1 | 0.5 | 72 | 47.5 |
| SMC5379B | 110 | 12 | 125 | 1000 | 1 | 0.5 | 79.2 | 43 |
| SMC5380B | 120 | 10 | 170 | 1150 | 1 | 0.5 | 86.4 | 39.5 |
| SMC5381B | 130 | 10 | 190 | 1250 | 1 | 0.5 | 93.2 | 36.6 |
| SMC5382B | 140 | 8 | 230 | 1500 | 1 | 0.5 | 101 | 34 |
| SMC5383B | 150 | 8 | 330 | 1500 | 1 | 0.5 | 108 | 31.6 |
| SMC5384B | 160 | 8 | 350 | 1650 | 1 | 0.5 | 115 | 29.4 |
| SMC5385B | 170 | 8 | 380 | 1750 | 1 | 0.5 | 122 | 28 |
| SMC5386B | 180 | 5 | 430 | 1750 | 1 | 0.5 | 130 | 26.4 |
| SMC5387B | 190 | 5 | 450 | 1850 | 1 | 0.5 | 137 | 25 |
| SMC5388B | 200 | 5 | 480 | 1850 | 1 | 0.5 | 144 | 23.6 |



Notes :

1. Zener Tolerance: $\pm 5\%$.
2. The zener impedance is derived from the 60-cycle ac voltage, which results when an ac current having an rms value equal to 10% of the dc zener current (I_{zr} or I_{zk}) is superimposed to I_{zr} or I_{zk} .
3. The max zener current is not absolute , Please confirm that the product of the voltage and current should not exceed the rated Power dissipation in actual zener application.

■特性曲线（典型）

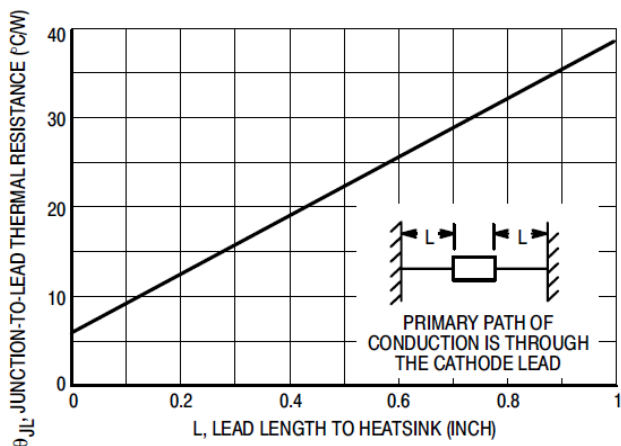


Figure 1. Typical Thermal Resistance

TEMPERATURE COEFFICIENTS

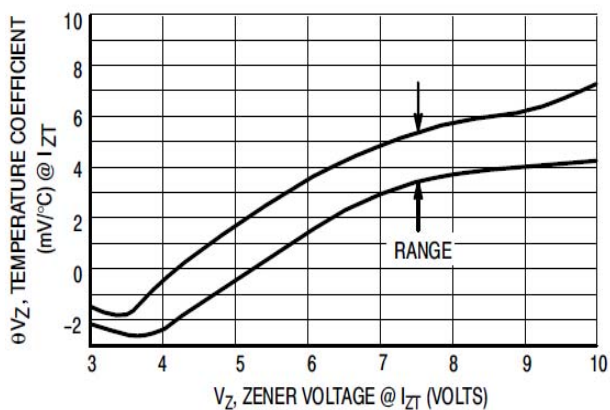


Figure 2. Temperature Coefficient-Range for Units 3 to 10 Volts

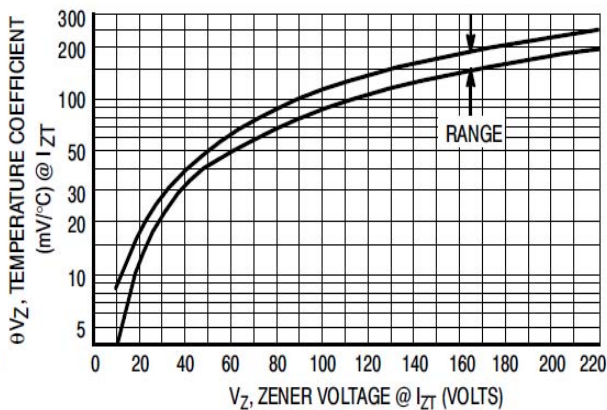


Figure 3. Temperature Coefficient-Range for Units 10 to 220 Volts



■特性曲线（典型）

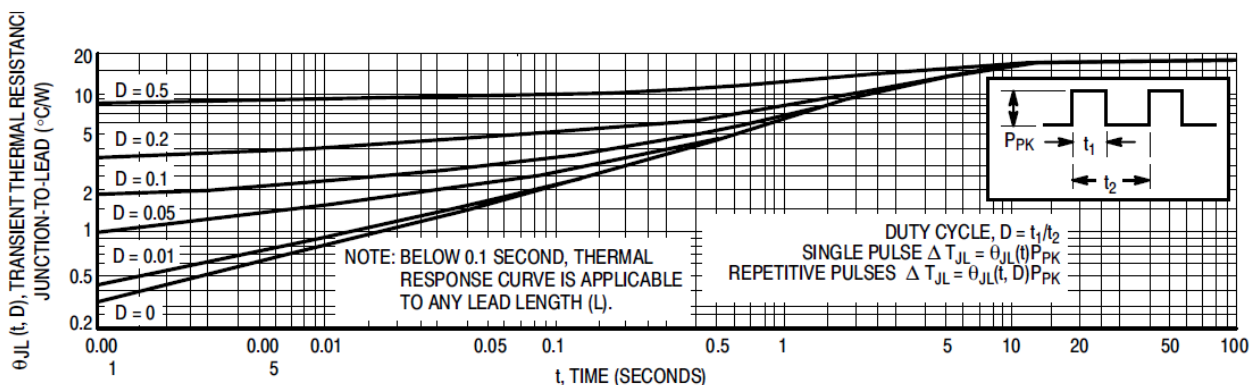


Figure 4. Typical Thermal Response
L, Lead Length = 3/8 Inch

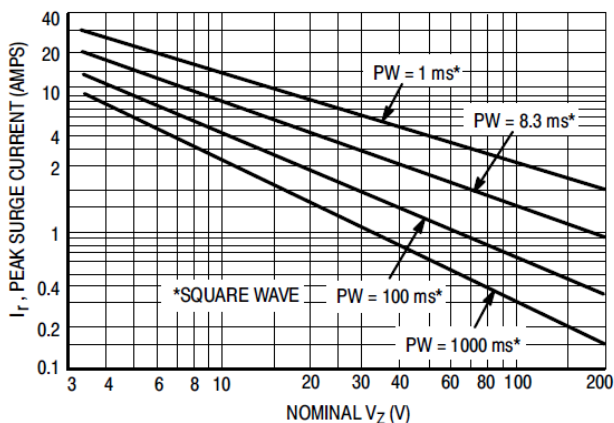


Figure 5. Maximum Non-Repetitive Surge Current
versus Nominal Zener Voltage

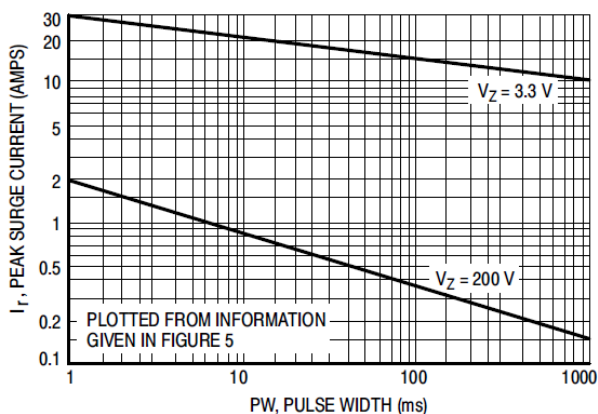


Figure 6. Peak Surge Current versus Pulse Width

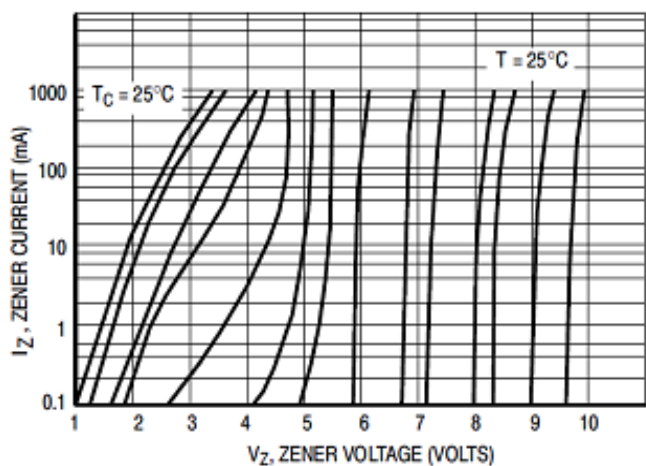


Figure 7. Zener Voltage versus Zener Current
V_Z = 3.3 thru 10 Volts

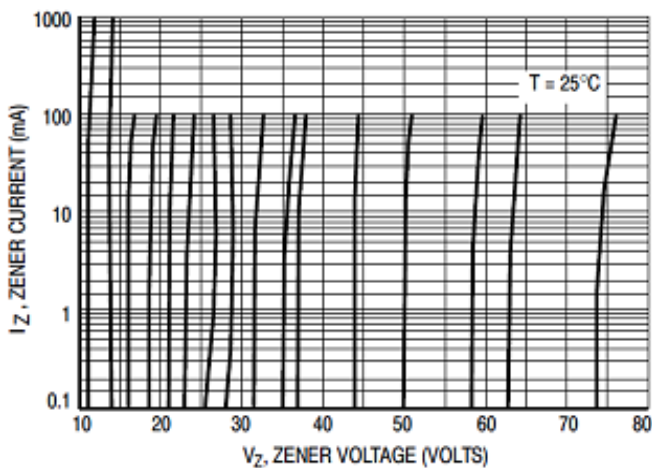


Figure 8. Zener Voltage versus Zener Current
V_Z = 11 thru 75 Volts



■特性曲线（典型）

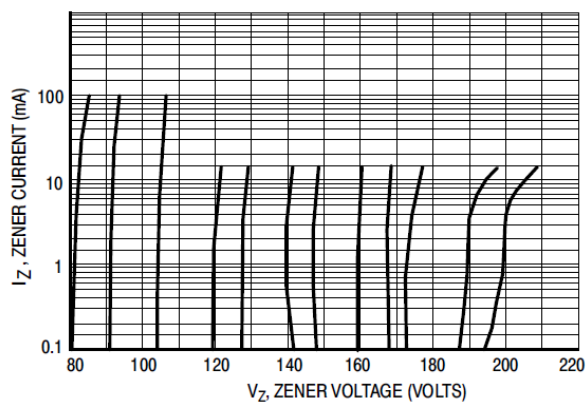


Figure 9. Zener Voltage versus Zener Current
 $V_Z = 82$ thru 200 Volts