



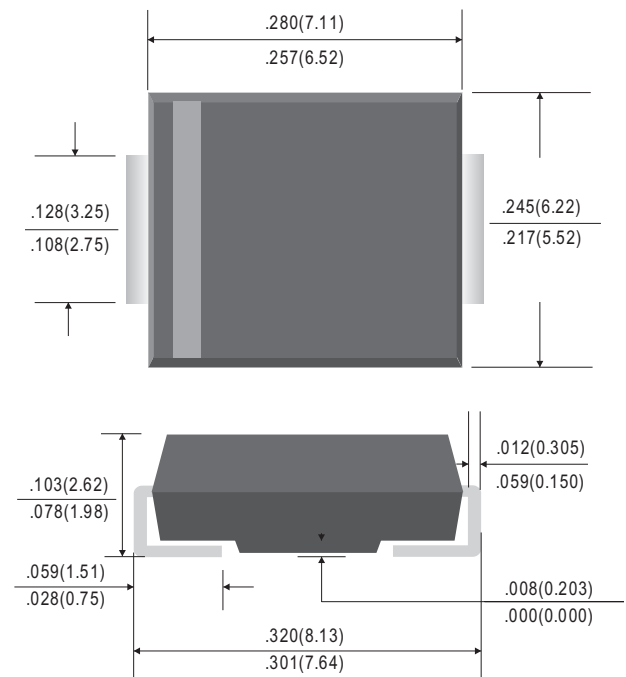
## Features

- 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
- RoHS compliant

## Mechanical Data

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Solderable per MIL-STD-750, method 2026 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any
- **Moisture Sensitivity Level 1**

## SMC / DO-214AB



Dimensions in inches and (millimeters)

## Maximum Ratings( $T_A=25^{\circ}\text{C}$ unless otherwise noted)

| Parameter  | Symbol    | Value         | UNIT               |
|--|-----------|---------------|--------------------|
| DC power dissipation at $T_L = 75^{\circ}\text{C}^{(1)}$ | $P_D$     | 5             | W                  |
| Maximum forward voltage at $I_F = 1\text{A}$             | $V_F$     | 1.2           | V                  |
| Junction temperature range                               | $T_J$     | - 55 to + 150 | $^{\circ}\text{C}$ |
| Storage temperature range                                | $T_{STG}$ | - 55 to + 150 | $^{\circ}\text{C}$ |

### Note:

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



#### Ratings and Characteristics Curves ( $T_A=25^\circ\text{C}$ unless otherwise noted)

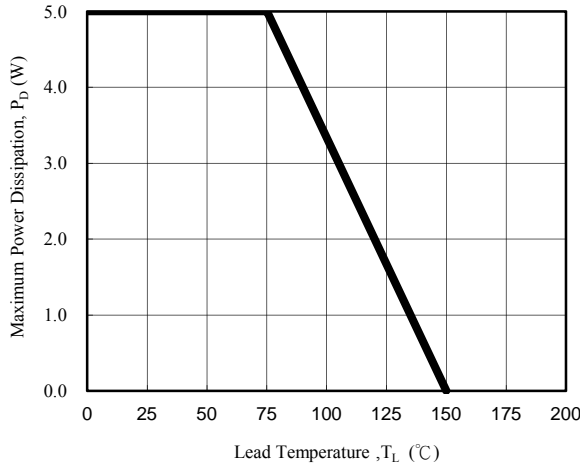


Fig. 1 - Power Temperature Derating Curve

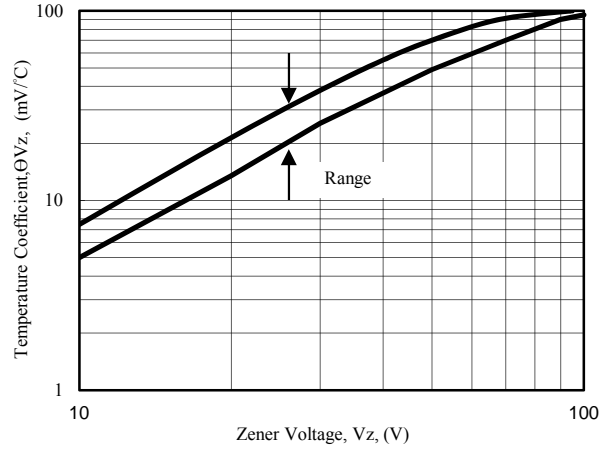


Fig. 2 - Temperature Coefficients v.s. Zener Voltage

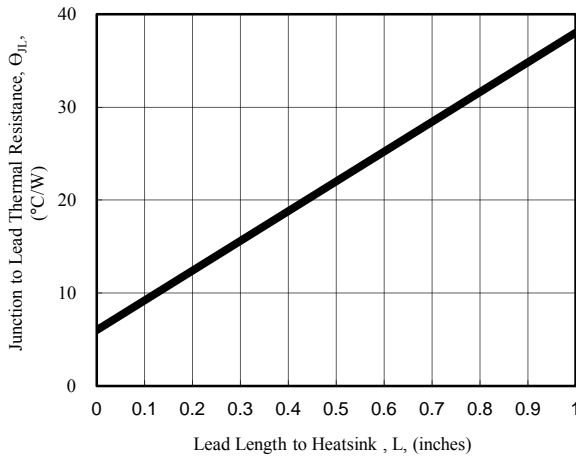


Fig. 3 - Typical Thermal Resistance v.s. Lead Length

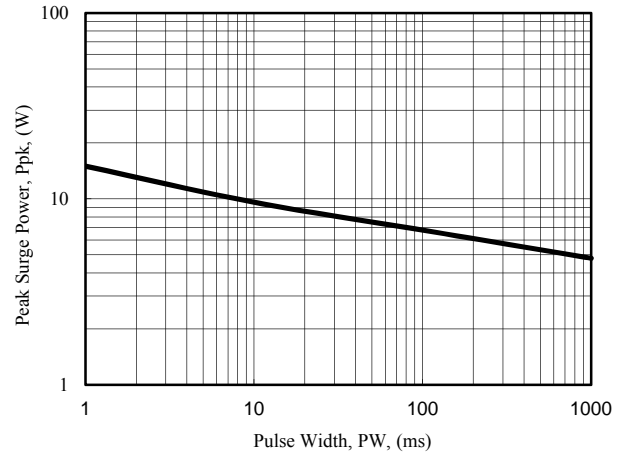


Fig. 4 - Maximum Surge Power

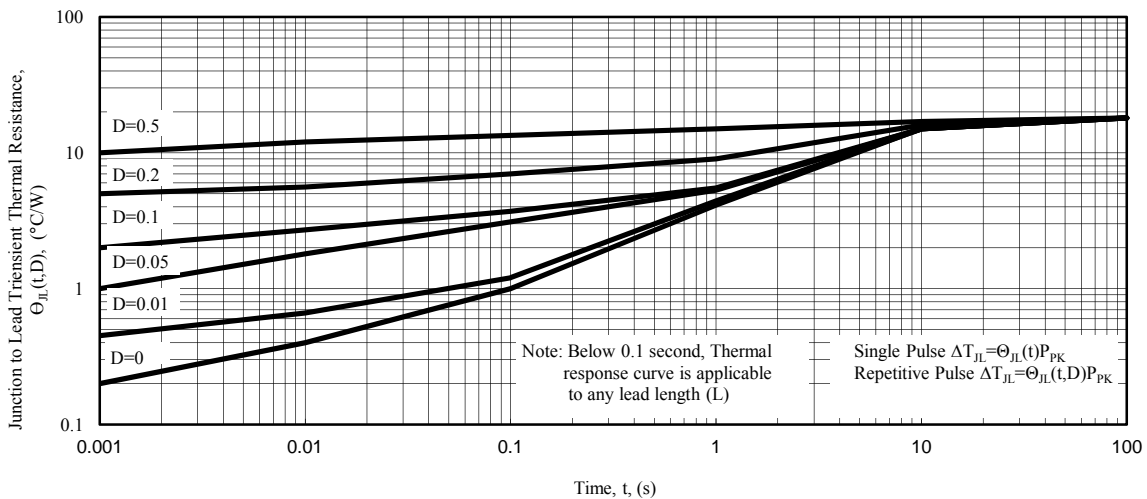


Fig. 5 - Typical Thermal Response L, Lead Length=3/8inch



## 5W SURFACE MOUNT ZENER DIODES- 6.2 to 200V SMC PACKAGE

## SMC5341B THRU SMC5388B

| Part No. | Nominal Zener Voltage            |        |        | Max. Zener Impedance              |     |                                   |    | Max Reverse Leakage Current     |      | Maximum DC Zener Current | Marking Code |
|----------|----------------------------------|--------|--------|-----------------------------------|-----|-----------------------------------|----|---------------------------------|------|--------------------------|--------------|
|          | V <sub>Z</sub> @ I <sub>ZT</sub> |        |        | Z <sub>ZT</sub> @ I <sub>ZT</sub> |     | Z <sub>ZK</sub> @ I <sub>ZK</sub> |    | I <sub>R</sub> @ V <sub>R</sub> |      | I <sub>ZM</sub>          |              |
|          | Nom. V                           | Min. V | Max. V | Ω                                 | mA  | Ω                                 | mA | μA                              | V    | (mA)                     |              |
| SMC5341B | 6.2                              | 5.89   | 6.51   | 1.0                               | 200 | 200                               | 1  | 1.0                             | 3.0  | 765.0                    | 341B         |
| SMC5342B | 6.8                              | 6.46   | 7.14   | 1.0                               | 175 | 200                               | 1  | 10.0                            | 5.2  | 700.0                    | 342B         |
| SMC5343B | 7.5                              | 7.13   | 7.88   | 1.5                               | 175 | 200                               | 1  | 10.0                            | 5.7  | 630.0                    | 343B         |
| SMC5344B | 8.2                              | 7.79   | 8.61   | 1.5                               | 150 | 200                               | 1  | 10.0                            | 6.2  | 580.0                    | 344B         |
| SMC5345B | 8.7                              | 8.27   | 9.14   | 2.0                               | 150 | 200                               | 1  | 10.0                            | 6.6  | 545.0                    | 345B         |
| SMC5346B | 9.1                              | 8.65   | 9.56   | 2.0                               | 150 | 150                               | 1  | 7.5                             | 6.9  | 520.0                    | 346B         |
| SMC5347B | 10.0                             | 9.50   | 10.50  | 2.0                               | 125 | 125                               | 1  | 5.0                             | 7.6  | 475.0                    | 347B         |
| SMC5348B | 11.0                             | 10.45  | 11.55  | 2.5                               | 125 | 125                               | 1  | 5.0                             | 8.4  | 430.0                    | 348B         |
| SMC5349B | 12.0                             | 11.40  | 12.60  | 2.5                               | 100 | 125                               | 1  | 2.0                             | 9.1  | 395.0                    | 349B         |
| SMC5350B | 13.0                             | 12.35  | 13.65  | 2.5                               | 100 | 100                               | 1  | 1.0                             | 9.9  | 365.0                    | 350B         |
| SMC5351B | 14.0                             | 13.30  | 14.70  | 2.5                               | 100 | 75                                | 1  | 1.0                             | 10.6 | 340.0                    | 351B         |
| SMC5352B | 15.0                             | 14.25  | 15.75  | 2.5                               | 75  | 75                                | 1  | 1.0                             | 11.5 | 315.0                    | 352B         |
| SMC5353B | 16.0                             | 15.20  | 16.80  | 2.5                               | 75  | 75                                | 1  | 1.0                             | 12.2 | 295.0                    | 353B         |
| SMC5354B | 17.0                             | 16.15  | 17.85  | 2.5                               | 70  | 75                                | 1  | 0.5                             | 12.9 | 280.0                    | 354B         |
| SMC5355B | 18.0                             | 17.10  | 18.90  | 2.5                               | 65  | 75                                | 1  | 0.5                             | 13.7 | 265.0                    | 355B         |
| SMC5356B | 19.0                             | 18.05  | 19.95  | 3.0                               | 65  | 75                                | 1  | 0.5                             | 14.4 | 250.0                    | 356B         |
| SMC5357B | 20.0                             | 19.00  | 21.00  | 3.0                               | 65  | 75                                | 1  | 0.5                             | 15.2 | 237.0                    | 357B         |
| SMC5358B | 22.0                             | 20.90  | 23.10  | 3.5                               | 50  | 75                                | 1  | 0.5                             | 16.7 | 216.0                    | 358B         |
| SMC5359B | 24.0                             | 22.80  | 25.20  | 3.5                               | 50  | 100                               | 1  | 0.5                             | 18.2 | 198.0                    | 359B         |
| SMC5360B | 25.0                             | 23.75  | 26.25  | 4.0                               | 50  | 110                               | 1  | 0.5                             | 19.0 | 190.0                    | 360B         |
| SMC5361B | 27.0                             | 25.65  | 28.35  | 5.0                               | 50  | 120                               | 1  | 0.5                             | 20.6 | 176.0                    | 361B         |
| SMC5362B | 28.0                             | 26.60  | 29.40  | 6.0                               | 50  | 130                               | 1  | 0.5                             | 21.2 | 170.0                    | 362B         |
| SMC5363B | 30.0                             | 28.50  | 31.50  | 8.0                               | 40  | 140                               | 1  | 0.5                             | 22.8 | 158.0                    | 363B         |
| SMC5364B | 33.0                             | 31.35  | 34.65  | 10.0                              | 40  | 150                               | 1  | 0.5                             | 25.1 | 144.0                    | 364B         |
| SMC5365B | 36.0                             | 34.20  | 37.80  | 11.0                              | 30  | 160                               | 1  | 0.5                             | 27.4 | 132.0                    | 365B         |
| SMC5366B | 39.0                             | 37.05  | 40.95  | 14.0                              | 30  | 170                               | 1  | 0.5                             | 29.7 | 122.0                    | 366B         |
| SMC5367B | 43.0                             | 40.85  | 45.15  | 20.0                              | 30  | 190                               | 1  | 0.5                             | 32.7 | 110.0                    | 367B         |
| SMC5368B | 47.0                             | 44.65  | 49.35  | 25.0                              | 25  | 210                               | 1  | 0.5                             | 35.8 | 100.0                    | 368B         |
| SMC5369B | 51.0                             | 48.45  | 53.55  | 27.0                              | 25  | 230                               | 1  | 0.5                             | 38.8 | 93.0                     | 369B         |
| SMC5370B | 56.0                             | 53.20  | 58.80  | 35.0                              | 20  | 280                               | 1  | 0.5                             | 42.6 | 86.0                     | 370B         |
| SMC5371B | 60.0                             | 57.00  | 63.00  | 40.0                              | 20  | 350                               | 1  | 0.5                             | 42.5 | 79.0                     | 371B         |
| SMC5372B | 62.0                             | 58.90  | 65.10  | 42.0                              | 20  | 400                               | 1  | 0.5                             | 47.1 | 76.0                     | 372B         |
| SMC5373B | 68.0                             | 64.60  | 71.40  | 44.0                              | 20  | 500                               | 1  | 0.5                             | 51.7 | 70.0                     | 373B         |
| SMC5374B | 75.0                             | 71.25  | 78.75  | 45.0                              | 20  | 620                               | 1  | 0.5                             | 56.0 | 63.0                     | 374B         |



## 5W SURFACE MOUNT ZENER DIODES- 6.2 to 500V SMC PACKAGE

## SMC5341B THRU SMC5388B

| Part No. | Nominal Zener Voltage            |        |        | Max. Zener Impedance              |    |                                   |    | Max Reverse Leakage Current     |       | Maximum DC Zener Current | Marking Code |
|----------|----------------------------------|--------|--------|-----------------------------------|----|-----------------------------------|----|---------------------------------|-------|--------------------------|--------------|
|          | V <sub>Z</sub> @ I <sub>ZT</sub> |        |        | Z <sub>ZT</sub> @ I <sub>ZT</sub> |    | Z <sub>ZK</sub> @ I <sub>ZK</sub> |    | I <sub>R</sub> @ V <sub>R</sub> |       | I <sub>ZM</sub>          |              |
|          | Nom. V                           | Min. V | Max. V | Ω                                 | mA | Ω                                 | mA | μA                              | V     | (mA)                     |              |
| SMC5375B | 82.0                             | 77.90  | 86.10  | 65.0                              | 15 | 720                               | 1  | 0.5                             | 62.2  | 58.0                     | 375B         |
| SMC5376B | 87.0                             | 82.65  | 91.35  | 75.0                              | 15 | 760                               | 1  | 0.5                             | 66.0  | 54.5                     | 376B         |
| SMC5377B | 91.0                             | 86.45  | 95.55  | 75.0                              | 15 | 760                               | 1  | 0.5                             | 69.2  | 52.5                     | 377B         |
| SMC5378B | 100.0                            | 95.00  | 105.00 | 90.0                              | 12 | 800                               | 1  | 0.5                             | 76.0  | 47.5                     | 378B         |
| SMC5379B | 110.0                            | 104.50 | 115.50 | 125.0                             | 12 | 1000                              | 1  | 0.5                             | 83.6  | 43.0                     | 379B         |
| SMC5380B | 120.0                            | 114.00 | 126.00 | 170.0                             | 10 | 1150                              | 1  | 0.5                             | 91.2  | 39.5                     | 380B         |
| SMC5381B | 130.0                            | 123.50 | 136.50 | 190.0                             | 10 | 1250                              | 1  | 0.5                             | 98.8  | 36.6                     | 381B         |
| SMC5382B | 140.0                            | 133.00 | 147.00 | 230.0                             | 8  | 1500                              | 1  | 0.5                             | 106.0 | 34.0                     | 382B         |
| SMC5383B | 150.0                            | 142.50 | 157.50 | 330.0                             | 8  | 1500                              | 1  | 0.5                             | 114.0 | 31.6                     | 383B         |
| SMC5384B | 160.0                            | 152.00 | 168.00 | 350.0                             | 8  | 1650                              | 1  | 0.5                             | 122.0 | 29.4                     | 384B         |
| SMC5385B | 170.0                            | 161.50 | 178.50 | 380.0                             | 8  | 1750                              | 1  | 0.5                             | 129.0 | 28.0                     | 385B         |
| SMC5386B | 180.0                            | 171.00 | 189.00 | 430.0                             | 5  | 1750                              | 1  | 0.5                             | 137.0 | 26.4                     | 386B         |
| SMC5387B | 190.0                            | 180.50 | 199.50 | 450.0                             | 5  | 1850                              | 1  | 0.5                             | 144.0 | 25.0                     | 387B         |
| SMC5388B | 200.0                            | 190.00 | 210.00 | 480.0                             | 5  | 1850                              | 1  | 0.5                             | 152.0 | 23.6                     | 388B         |



### Ordering Information:

| Device PN  | Packing                |
|--|------------------------|
| Part Number -T <sup>(1)</sup> G <sup>(2)</sup> -WS | Tape&Reel: 3 Kpcs/Reel |

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

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