**CMZ5334B THRU CMZ5388B**

**SURFACE MOUNT**
**HIGH POWER SILICON ZENER DIODE**
**10 WATT, 3.6 THRU 200 VOLTS**
**5% TOLERANCE**

**SMC CASE**

Central Semiconductor Corp.

www.centralsemi.com

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMZ5334B series silicon Zener diode is a high quality voltage regulator, manufactured in an epoxy molded surface mount package, and designed for use in industrial, commercial, entertainment and computer applications.

**MARKING: SEE MARKING CODE ON ELECTRICAL CHARACTERISTICS TABLE**

| **MAXIMUM RATINGS:** ($T_A$=25°C) | **SYMBOL** | | **UNITS** |
|---|---|---|---|
| Power Dissipation ($T_L$=100°C) | $P_D$ | 10 | W |
| Operating and Storage Junction Temperature | $T_J$, $T_{stg}$ | -65 to +200 | °C |
| Thermal Resistance | $\Theta_{JL}$ | 10 | °C/W |
| Thermal Resistance | $\Theta_{JA}$ | 87.5 | °C/W |

**ELECTRICAL CHARACTERISTICS:** ($T_A$=25°C unless otherwise noted) $V_F$=1.2V MAX @ $I_F$=1.0A (for all types)

| TYPE | ZENER VOLTAGE $V_Z$ @ $I_{ZT}$ | | | TEST CURRENT | MAXIMUM ZENER IMPEDANCE | | | MAXIMUM REVERSE CURRENT | | MAXIMUM SURGE CURRENT (Note 1) | MAXIMUM VOLTAGE REGULATION (Note 2) | MAXIMUM REGULATOR CURRENT | MARKING CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MIN | NOM | MAX | $I_{ZT}$ | $Z_{ZT}$ @ $I_{ZT}$ | $Z_{ZK}$ @ $I_{ZK}$ | | $I_R$ @ $V_R$ | | $i_r$ | $\Delta V_Z$ | $I_{ZM}$ | |
| | V | V | V | mA | Ω | Ω | mA | μA | V | A | V | mA | |
| CMZ5334B | 3.420 | 3.6 | 3.780 | 350 | 3.0 | 500 | 1.0 | 150 | 1.0 | 18.7 | 0.80 | 1320 | C5334B |
| CMZ5335B | 3.705 | 3.9 | 4.095 | 320 | 2.0 | 500 | 1.0 | 50 | 1.0 | 17.6 | 0.54 | 1220 | C5335B |
| CMZ5336B | 4.085 | 4.3 | 4.515 | 290 | 2.0 | 500 | 1.0 | 10 | 1.0 | 16.4 | 0.49 | 1100 | C5336B |
| CMZ5337B | 4.465 | 4.7 | 4.935 | 264 | 2.0 | 450 | 1.0 | 10 | 1.0 | 15.3 | 0.44 | 1010 | C5337B |
| CMZ5338B | 4.845 | 5.1 | 5.355 | 240 | 2.0 | 400 | 1.0 | 10 | 1.0 | 14.4 | 0.39 | 930 | C5338B |
| CMZ5339B | 5.320 | 5.6 | 5.880 | 220 | 1.0 | 400 | 1.0 | 10 | 2.0 | 13.4 | 0.25 | 865 | C5339B |
| CMZ5340B | 5.700 | 6.0 | 6.300 | 200 | 1.0 | 300 | 1.0 | 10 | 3.0 | 12.7 | 0.25 | 790 | C5340B |
| CMZ5342B | 6.460 | 6.8 | 7.140 | 175 | 1.0 | 200 | 1.0 | 100 | 5.2 | 11.5 | 0.15 | 700 | C5342B |
| CMZ5343B | 7.125 | 7.5 | 7.875 | 175 | 1.5 | 200 | 1.0 | 100 | 5.7 | 10.7 | 0.15 | 630 | C5343B |
| CMZ5344B | 7.790 | 8.2 | 8.610 | 150 | 1.5 | 200 | 1.0 | 100 | 6.2 | 10.0 | 0.20 | 580 | C5344B |
| CMZ5345B | 8.265 | 8.7 | 9.135 | 150 | 2.0 | 200 | 1.0 | 100 | 6.6 | 7.5 | 0.20 | 545 | C5345B |
| CMZ5346B | 8.645 | 9.1 | 9.555 | 150 | 2.0 | 150 | 1.0 | 7.5 | 6.9 | 9.2 | 0.22 | 520 | C5346B |
| CMZ5347B | 9.500 | 10 | 10.50 | 125 | 2.0 | 125 | 1.0 | 5.0 | 7.6 | 8.6 | 0.22 | 475 | C5347B |
| CMZ5348B | 10.45 | 11 | 11.55 | 125 | 2.5 | 125 | 1.0 | 5.0 | 8.4 | 8.0 | 0.25 | 430 | C5348B |
| CMZ5349B | 11.40 | 12 | 12.60 | 100 | 2.5 | 125 | 1.0 | 2.0 | 9.1 | 7.5 | 0.25 | 395 | C5349B |
| CMZ5350B | 12.35 | 13 | 13.65 | 100 | 2.5 | 100 | 1.0 | 1.0 | 9.9 | 7.0 | 0.25 | 365 | C5350B |
| CMZ5351B | 13.30 | 14 | 14.70 | 100 | 2.5 | 75 | 1.0 | 1.0 | 10.6 | 6.7 | 0.25 | 340 | C5351B |
| CMZ5352B | 14.25 | 15 | 15.75 | 75 | 2.5 | 75 | 1.0 | 1.0 | 11.5 | 6.3 | 0.25 | 315 | C5352B |
| CMZ5353B | 15.20 | 16 | 16.80 | 75 | 2.5 | 75 | 1.0 | 1.0 | 12.2 | 6.0 | 0.30 | 295 | C5353B |
| CMZ5354B | 16.15 | 17 | 17.85 | 70 | 2.5 | 75 | 1.0 | 0.5 | 12.9 | 5.8 | 0.35 | 280 | C5354B |
| CMZ5355B | 17.10 | 18 | 18.90 | 65 | 2.5 | 75 | 1.0 | 0.5 | 13.7 | 5.5 | 0.40 | 264 | C5355B |
| CMZ5356B | 18.05 | 19 | 19.95 | 65 | 3.0 | 75 | 1.0 | 0.5 | 14.4 | 5.3 | 0.40 | 250 | C5356B |
| CMZ5357B | 19.00 | 20 | 21.00 | 65 | 3.0 | 75 | 1.0 | 0.5 | 15.2 | 5.1 | 0.40 | 237 | C5357B |
| CMZ5358B | 20.90 | 22 | 23.10 | 50 | 3.5 | 75 | 1.0 | 0.5 | 16.7 | 4.7 | 0.45 | 216 | C5358B |

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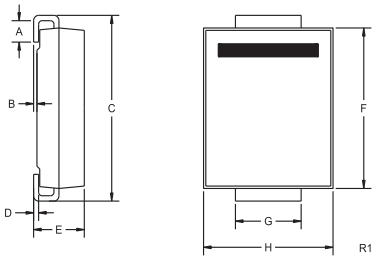
**ELECTRICAL CHARACTERISTICS - Continued:** ($T_A$=25°C) $V_F$=1.2V MAX @ $I_F$=1.0A (for all types)

| TYPE | ZENER VOLTAGE $V_Z$ @ $I_{ZT}$ | | | TEST CURRENT | MAXIMUM ZENER IMPEDANCE | | | MAXIMUM REVERSE CURRENT | | MAXIMUM SURGE CURRENT (Note 1) | MAXIMUM VOLTAGE REGULATION (Note 2) | MAXIMUM REGULATOR CURRENT | MARKING CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MIN | NOM | MAX | $I_{ZT}$ | $Z_{ZT}$ @ $I_{ZT}$ | $Z_{ZK}$ @ $I_{ZK}$ | | $I_R$ @ $V_R$ | | $i_r$ | $\Delta V_Z$ | $I_{ZM}$ | |
| | V | V | V | mA | Ω | Ω | mA | μA | V | A | V | mA | |
| CMZ5359B | 22.80 | 24 | 25.20 | 50 | 3.5 | 100 | 1.0 | 0.5 | 18.2 | 4.4 | 0.55 | 198 | C5359B |
| CMZ5360B | 23.75 | 25 | 26.25 | 50 | 4.0 | 110 | 1.0 | 0.5 | 19.0 | 4.3 | 0.55 | 190 | C5360B |
| CMZ5361B | 25.65 | 27 | 28.35 | 50 | 5.0 | 120 | 1.0 | 0.5 | 20.6 | 4.1 | 0.60 | 176 | C5361B |
| CMZ5362B | 26.60 | 28 | 29.40 | 50 | 6.0 | 130 | 1.0 | 0.5 | 21.2 | 3.9 | 0.60 | 170 | C5362B |
| CMZ5363B | 28.50 | 30 | 31.50 | 40 | 8.0 | 140 | 1.0 | 0.5 | 22.8 | 3.7 | 0.60 | 158 | C5363B |
| CMZ5364B | 31.35 | 33 | 34.65 | 40 | 10 | 150 | 1.0 | 0.5 | 25.1 | 3.5 | 0.65 | 144 | C5364B |
| CMZ5365B | 34.20 | 36 | 37.80 | 30 | 11 | 160 | 1.0 | 0.5 | 27.4 | 3.3 | 0.65 | 132 | C5365B |
| CMZ5366B | 37.05 | 39 | 40.95 | 30 | 14 | 170 | 1.0 | 0.5 | 29.7 | 3.1 | 0.65 | 122 | C5366B |
| CMZ5367B | 40.85 | 43 | 45.15 | 30 | 20 | 190 | 1.0 | 0.5 | 32.7 | 2.8 | 0.70 | 110 | C5367B |
| CMZ5368B | 44.65 | 47 | 49.35 | 25 | 25 | 210 | 1.0 | 0.5 | 35.8 | 2.7 | 0.80 | 100 | C5368B |
| CMZ5369B | 48.45 | 51 | 53.55 | 25 | 27 | 230 | 1.0 | 0.5 | 38.8 | 2.5 | 0.90 | 93.0 | C5369B |
| CMZ5370B | 53.20 | 56 | 58.80 | 20 | 35 | 280 | 1.0 | 0.5 | 42.6 | 2.3 | 1.00 | 86.0 | C5370B |
| CMZ5371B | 57.00 | 60 | 63.00 | 20 | 40 | 350 | 1.0 | 0.5 | 45.5 | 2.2 | 1.20 | 79.0 | C5371B |
| CMZ5372B | 58.90 | 62 | 65.10 | 20 | 42 | 400 | 1.0 | 0.5 | 47.1 | 2.1 | 1.35 | 76.0 | C5372B |
| CMZ5373B | 64.60 | 68 | 71.40 | 20 | 44 | 500 | 1.0 | 0.5 | 51.7 | 2.0 | 1.50 | 70.0 | C5373B |
| CMZ5374B | 71.25 | 75 | 78.75 | 20 | 45 | 620 | 1.0 | 0.5 | 56.0 | 1.9 | 1.60 | 63.0 | C5374B |
| CMZ5375B | 77.90 | 82 | 86.10 | 15 | 65 | 720 | 1.0 | 0.5 | 62.2 | 1.8 | 1.80 | 58.0 | C5375B |
| CMZ5376B | 82.65 | 87 | 91.35 | 15 | 75 | 760 | 1.0 | 0.5 | 66.0 | 1.7 | 2.00 | 54.5 | C5376B |
| CMZ5377B | 86.45 | 91 | 95.55 | 15 | 75 | 760 | 1.0 | 0.5 | 69.2 | 1.6 | 2.20 | 52.5 | C5377B |
| CMZ5378B | 95.00 | 100 | 105.0 | 12 | 90 | 800 | 1.0 | 0.5 | 76.0 | 1.5 | 2.50 | 47.5 | C5378B |
| CMZ5379B | 104.5 | 110 | 115.5 | 12 | 125 | 1000 | 1.0 | 0.5 | 83.6 | 1.4 | 2.50 | 43.0 | C5379B |
| CMZ5380B | 114.0 | 120 | 126.0 | 10 | 170 | 1150 | 1.0 | 0.5 | 91.2 | 1.3 | 2.50 | 39.5 | C5380B |
| CMZ5381B | 123.5 | 130 | 136.5 | 10 | 190 | 1250 | 1.0 | 0.5 | 98.8 | 1.2 | 2.50 | 36.6 | C5381B |
| CMZ5382B | 133.0 | 140 | 147.0 | 8.0 | 230 | 1500 | 1.0 | 0.5 | 106 | 1.2 | 2.50 | 34.0 | C5382B |
| CMZ5383B | 142.5 | 150 | 157.5 | 8.0 | 330 | 1500 | 1.0 | 0.5 | 114 | 1.1 | 3.00 | 31.6 | C5383B |
| CMZ5384B | 152.0 | 160 | 168.0 | 8.0 | 350 | 1650 | 1.0 | 0.5 | 122 | 1.1 | 3.00 | 29.4 | C5384B |
| CMZ5385B | 161.5 | 170 | 178.5 | 8.0 | 380 | 1750 | 1.0 | 0.5 | 129 | 1.0 | 3.00 | 28.0 | C5385B |
| CMZ5386B | 171.0 | 180 | 189.0 | 5.0 | 430 | 1750 | 1.0 | 0.5 | 137 | 1.0 | 4.00 | 26.4 | C5386B |
| CMZ5387B | 180.5 | 190 | 199.5 | 5.0 | 450 | 1850 | 1.0 | 0.5 | 144 | 0.9 | 5.00 | 25.0 | C5387B |
| CMZ5388B | 190.0 | 200 | 210.0 | 5.0 | 480 | 1850 | 1.0 | 0.5 | 152 | 0.9 | 5.00 | 23.6 | C5388B |

Notes: (1) Surge Current ($i_r$) - Maximum allowable peak, non-recurrent square wave current (tp=8.3ms).
(2) Voltage Regulation ($\Delta V_Z$) - $V_Z$ Measurements are made at 10% and then at 50% of the $I_Z$ max value listed in the electrical characteristics table. The test current time duration for each $V_Z$ measurement is 40±10ms ($T_A$=25°C).

**SMC CASE - MECHANICAL OUTLINE**




| DIMENSIONS | | | | |
|---|---|---|---|---|
| | INCHES | | MILLIMETERS | |
| SYMBOL | MIN | MAX | MIN | MAX |
| A | 0.030 | 0.060 | 0.76 | 1.52 |
| B | 0.004 | 0.008 | 0.10 | 0.20 |
| C | 0.305 | 0.320 | 7.75 | 8.13 |
| D | 0.006 | 0.012 | 0.15 | 0.31 |
| E | 0.079 | 0.103 | 2.00 | 2.62 |
| F | 0.260 | 0.280 | 6.60 | 7.11 |
| G | 0.108 | 0.124 | 2.75 | 3.15 |
| H | 0.220 | 0.245 | 5.59 | 6.22 |

SMC (REV: R1)

R9 (8-February 2012)

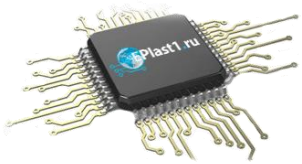
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.




**Как с нами связаться**

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