

2% 500mW SOD-523 PLANAR ZENER SERIES

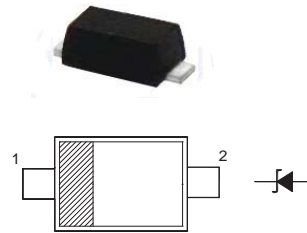
Features

- Standard Zener Breakdown Voltage Range 2.0 V to 75 V
- Steady State Power Rating of 500 mW

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
resistive or inductive load.

Top View
Simplified outline SOD-523 and symbol



PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1 | Cathode |
| 2 | Anode |

Absolute Maximum Ratings ($T_a = 25\text{ °C}$)

| Parameter | Symbol | Value | Unit |
|--|----------------|---------------|------|
| Total Device Dissipation | P_{tot} | 500 | mW |
| Junction and Storage Temperature Range | T_j, T_{stg} | - 65 to + 150 | °C |

Characteristics at $T_a = 25\text{ °C}$

| Parameter | Symbol | Max. | Unit |
|--|--------|------|------|
| Forward Voltage at $I_F = 10\text{ mA}$ | V_F | 0.9 | V |

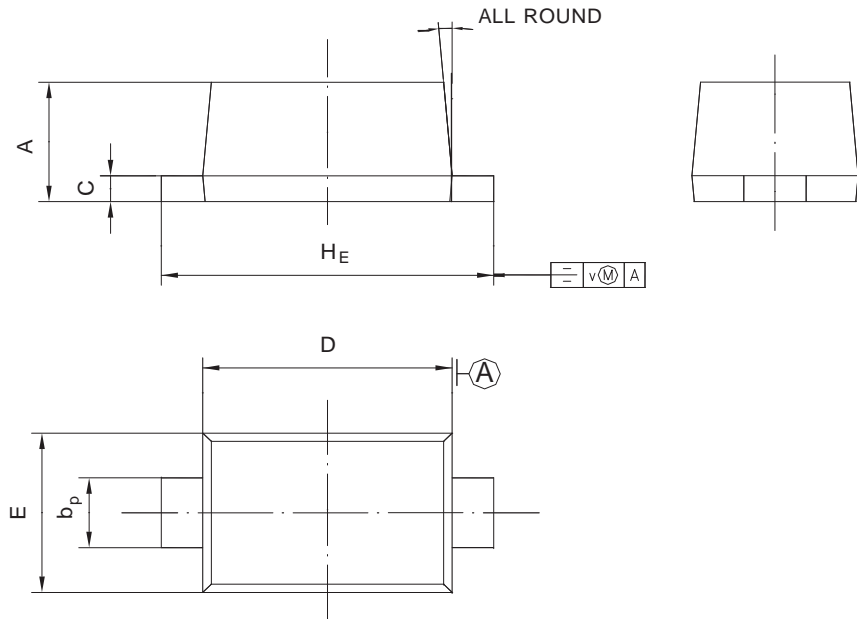
| Type | Marking Code | Zener Voltage ¹⁾ | | | | Zener Impedance | | | Leakage Current | |
|----------|--------------|-----------------------------|------|-------|--------------------|-----------------|-----------------|--------------------|-----------------|-------------------|
| | | V _{ZT} (V) | | | at I _{ZT} | Z _{ZT} | Z _{ZK} | at I _{ZK} | I _R | at V _R |
| | | Min. | Nom. | Max. | mA | Ω | Ω | mA | μA | V |
| MM5Z2V0B | RD | 1.96 | 2.0 | 2.04 | 5 | 100 | - | - | 120 | 0.5 |
| MM5Z2V2B | RE | 2.15 | 2.2 | 2.24 | 5 | 100 | - | - | 120 | 0.7 |
| MM5Z2V4B | Z7 | 2.35 | 2.4 | 2.45 | 5 | 100 | 1000 | 1 | 120 | 1 |
| MM5Z2V7B | A8 | 2.65 | 2.7 | 2.75 | 5 | 100 | 1000 | 1 | 120 | 1 |
| MM5Z3V0B | B8 | 2.94 | 3.0 | 3.06 | 5 | 100 | 1000 | 1 | 50 | 1 |
| MM5Z3V3B | C8 | 3.23 | 3.3 | 3.37 | 5 | 95 | 1000 | 1 | 20 | 1 |
| MM5Z3V6B | D8 | 3.53 | 3.6 | 3.67 | 5 | 90 | 1000 | 1 | 10 | 1 |
| MM5Z3V9B | E8 | 3.82 | 3.9 | 3.98 | 5 | 90 | 1000 | 1 | 5 | 1 |
| MM5Z4V3B | F8 | 4.21 | 4.3 | 4.39 | 5 | 90 | 1000 | 1 | 5 | 1 |
| MM5Z4V7B | G8 | 4.61 | 4.7 | 4.79 | 5 | 80 | 800 | 1 | 2 | 1 |
| MM5Z5V1B | H8 | 5.0 | 5.1 | 5.2 | 5 | 60 | 500 | 1 | 2 | 1.5 |
| MM5Z5V6B | I8 | 5.49 | 5.6 | 5.71 | 5 | 40 | 200 | 1 | 1 | 2.5 |
| MM5Z6V2B | J8 | 6.08 | 6.2 | 6.32 | 5 | 10 | 100 | 1 | 1 | 3 |
| MM5Z6V8B | K8 | 6.66 | 6.8 | 6.94 | 5 | 15 | 160 | 1 | 0.5 | 3.5 |
| MM5Z7V5B | L8 | 7.35 | 7.5 | 7.65 | 5 | 15 | 160 | 1 | 0.5 | 4 |
| MM5Z8V2B | M8 | 8.04 | 8.2 | 8.36 | 5 | 15 | 160 | 1 | 0.5 | 5 |
| MM5Z9V1B | N8 | 8.92 | 9.1 | 9.28 | 5 | 15 | 160 | 1 | 0.5 | 6 |
| MM5Z10B | O8 | 9.8 | 10 | 10.2 | 5 | 20 | 160 | 1 | 0.05 | 7 |
| MM5Z11B | P8 | 10.78 | 11 | 11.22 | 5 | 20 | 160 | 1 | 0.05 | 8 |
| MM5Z12B | Q8 | 11.76 | 12 | 12.24 | 5 | 25 | 80 | 1 | 0.05 | 9 |
| MM5Z13B | R8 | 12.74 | 13 | 13.26 | 5 | 30 | 80 | 1 | 0.05 | 10 |
| MM5Z15B | S8 | 14.7 | 15 | 15.3 | 5 | 30 | 80 | 1 | 0.05 | 11 |
| MM5Z16B | T8 | 15.68 | 16 | 16.32 | 2 | 40 | 80 | 1 | 0.05 | 12 |
| MM5Z18B | U8 | 17.64 | 18 | 18.36 | 2 | 45 | 80 | 1 | 0.05 | 13 |
| MM5Z20B | V8 | 19.6 | 20 | 20.4 | 2 | 55 | 100 | 1 | 0.05 | 15 |
| MM5Z22B | W8 | 21.56 | 22 | 22.44 | 2 | 55 | 100 | 1 | 0.05 | 17 |
| MM5Z24B | X8 | 23.52 | 24 | 24.48 | 2 | 70 | 120 | 1 | 0.05 | 19 |
| MM5Z27B | Y8 | 26.46 | 27 | 27.54 | 2 | 80 | 300 | 1 | 0.05 | 21 |
| MM5Z30B | Z8 | 29.4 | 30 | 30.6 | 2 | 80 | 300 | 1 | 0.05 | 23 |
| MM5Z33B | A9 | 32.34 | 33 | 33.66 | 2 | 80 | 300 | 1 | 0.05 | 29 |
| MM5Z36B | B9 | 35.28 | 36 | 36.72 | 2 | 90 | 500 | 1 | 0.05 | 27 |
| MM5Z39B | C9 | 38.22 | 39 | 39.78 | 2 | 130 | 500 | 1 | 2 | 30 |
| MM5Z43B | D9 | 42.14 | 43 | 43.86 | 1 | 150 | 500 | 1 | 2 | 33 |
| MM5Z47B | E9 | 46.06 | 47 | 47.94 | 1 | 170 | 500 | 1 | 2 | 36 |
| MM5Z51B | F9 | 49.98 | 51 | 52.02 | 1 | 180 | 500 | 1 | 1 | 39 |
| MM5Z56B | G9 | 54.88 | 56 | 57.12 | 1 | 200 | 500 | 1 | 1 | 43 |
| MM5Z62B | H9 | 60.76 | 62 | 63.24 | 1 | 215 | 500 | 1 | 0.2 | 47 |
| MM5Z68B | I9 | 66.64 | 68 | 69.36 | 1 | 240 | 500 | 1 | 0.2 | 52 |
| MM5Z75B | J9 | 73.5 | 75 | 76.5 | 1 | 255 | 500 | 1 | 0.2 | 57 |

¹⁾ Tested with pulses t_p = 20 ms.

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



| UNIT | A | b_p | C | D | E | H_E | V | |
|------|--------------|------------|----------------|--------------|--------------|------------|-----|----|
| mm | 0.70 0.60 | 0.4 0.3 | 0.135 0.100 | 1.25 1.15 | 0.85 0.75 | 1.7 1.5 | 0.1 | 5° |

PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

| PACKAGE | PACKING CODE | EA PER REEL | EA PER INNER BOX | COMPONENT SPACE (mm) | TAPE SPACE (mm) | REEL DIA (mm) | CARTON SIZE (mm) | EA PER CARTON | GROSS WEIGHT(Kg) |
|---------|--------------|-------------|------------------|----------------------|-----------------|---------------|------------------|---------------|------------------|
| SOD-523 | -T | 8,000 | -- | --- | --- | 178 | 390*205*31 | 320,000 | 6.16 |

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- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
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Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.