



MMSZ4687-V ~ MMSZ4717-V

SURFACE MOUNT SILICON ZENER DIODES

VOLTAGE 4.3 ~ 43Volt **POWER** 500 mWatt

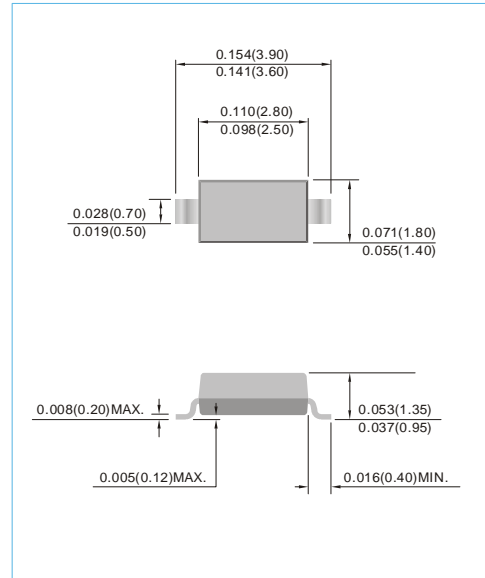
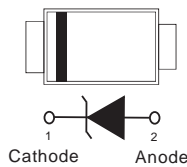
SOD-123 Unit : inch(mm)

FEATURES

- Planar Die construction
- 500mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SOD-123, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0003 ounce, 0.0103 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

| Parameter | Symbol | Value | Units |
|---|------------------------------------|-------------|--------------------|
| Maximum Power Dissipation (NOTES 1) at $T_C=65^\circ\text{C}$ | P_D | 500 | mW |
| Typical Thermal Resistance (NOTES 2) (NOTES 1) | $R_{\theta JA}$ $R_{\theta JC}$ | 540 170 | $^\circ\text{C/W}$ |
| Operating Junction and Storage Temperature Range | T_J, T_{STG} | -55 to +150 | $^\circ\text{C}$ |

NOTES:

1. Device mounted on a infinite heatsink.
2. Device mounted on a single-sided copper, mini pad.



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| Part Number | Nominal Zener Voltage | | | | Max Reverse Leakage Current | | Marking Code |
|-------------|----------------------------------|--------|--------|------|---------------------------------|------|--------------|
| | V _Z @ I _{ZT} | | | | I _R @ V _R | | |
| | Nom. V | Min. V | Max. V | mA | μA | V | |
| MMSZ4687-V | 4.3 | 4.09 | 4.52 | 0.05 | 4 | 2 | CP |
| MMSZ4688-V | 4.7 | 4.47 | 4.94 | 0.05 | 10 | 3 | CT |
| MMSZ4689-V | 5.1 | 4.85 | 5.36 | 0.05 | 10 | 3 | CU |
| MMSZ46895-V | 5.3 | 5.03 | 5.57 | 0.05 | 10 | 4 | CC |
| MMSZ4690-V | 5.6 | 5.32 | 5.88 | 0.05 | 10 | 4 | CV |
| MMSZ4691-V | 6.2 | 5.89 | 6.51 | 0.05 | 10 | 5 | CA |
| MMSZ4692-V | 6.8 | 6.46 | 7.14 | 0.05 | 10 | 5.1 | CX |
| MMSZ4694-V | 8.2 | 7.79 | 8.61 | 0.05 | 1 | 6.2 | CZ |
| MMSZ4696-V | 9.1 | 8.65 | 9.56 | 0.05 | 1 | 6.9 | DD |
| MMSZ4697-V | 10 | 9.5 | 10.5 | 0.05 | 1 | 7.6 | DE |
| MMSZ4699-V | 12 | 11.40 | 12.60 | 0.05 | 0.05 | 9.1 | DH |
| MMSZ4700-V | 13 | 12.40 | 13.70 | 0.05 | 0.05 | 9.8 | DJ |
| MMSZ4701-V | 14 | 13.30 | 14.70 | 0.05 | 0.05 | 10.6 | DK |
| MMSZ4702-V | 15 | 14.30 | 15.80 | 0.05 | 0.05 | 11.4 | DM |
| MMSZ4703-V | 16 | 15.20 | 16.80 | 0.05 | 0.05 | 12.1 | DN |
| MMSZ4704-V | 17 | 16.20 | 17.90 | 0.05 | 0.05 | 12.9 | DP |
| MMSZ4705-V | 18 | 17.10 | 18.90 | 0.05 | 0.05 | 13.6 | DT |
| MMSZ4707-V | 20 | 19.00 | 21.00 | 0.05 | 0.01 | 15.2 | DV |
| MMSZ4708-V | 22 | 20.90 | 23.10 | 0.05 | 0.01 | 16.7 | DA |
| MMSZ4709-V | 24 | 22.80 | 25.20 | 0.05 | 0.01 | 18.2 | DZ |
| MMSZ4710-V | 25 | 23.80 | 26.30 | 0.05 | 0.01 | 19 | DY |
| MMSZ4711-V | 27 | 25.70 | 28.40 | 0.05 | 0.01 | 20.4 | EA |
| MMSZ4712-V | 28 | 26.60 | 29.40 | 0.05 | 0.01 | 21.2 | EC |
| MMSZ4713-V | 30 | 28.50 | 31.50 | 0.05 | 0.01 | 22.8 | ED |
| MMSZ4714-V | 33 | 31.40 | 34.70 | 0.05 | 0.01 | 25 | EE |
| MMSZ4715-V | 36 | 34.20 | 37.80 | 0.05 | 0.01 | 27.3 | EF |
| MMSZ4717-V | 43 | 40.90 | 45.20 | 0.05 | 0.01 | 32.6 | EJ |



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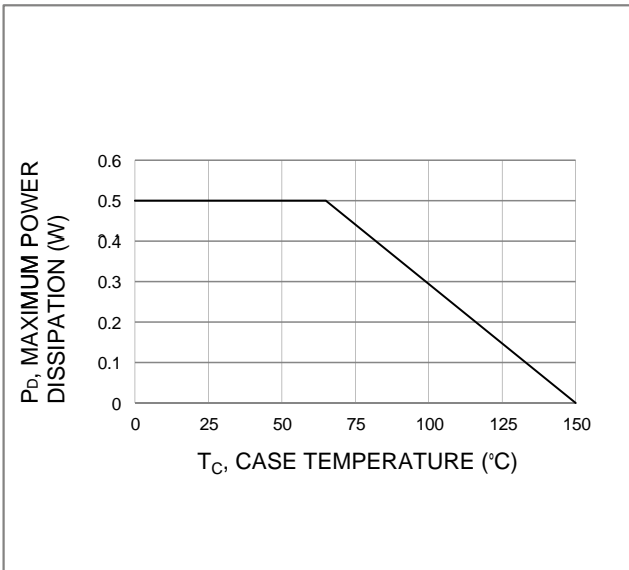


Fig.1 DERATING CURVE

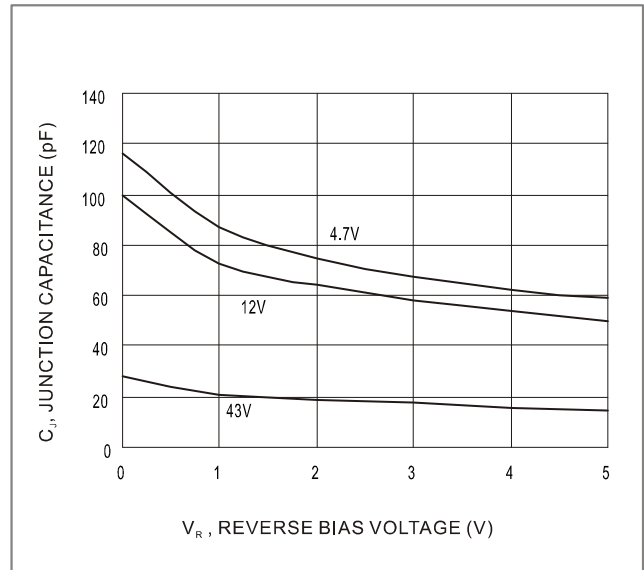


Fig.2 TYPICAL JUNCTION CAPACITANCE

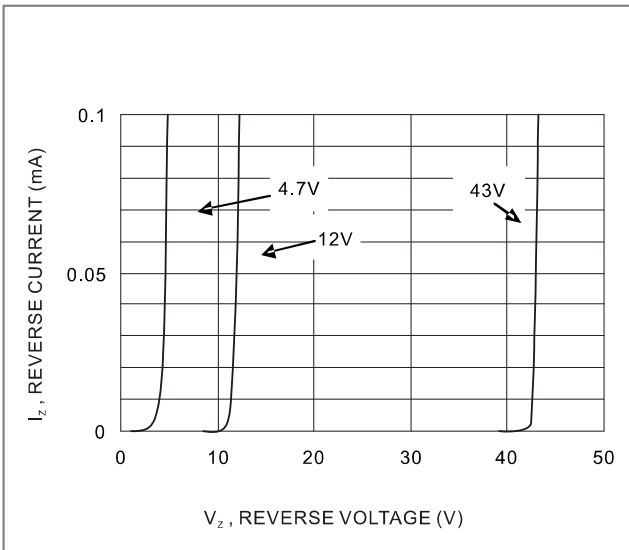


Fig.3 TYPICAL REVERSE CHARACTERISTICS

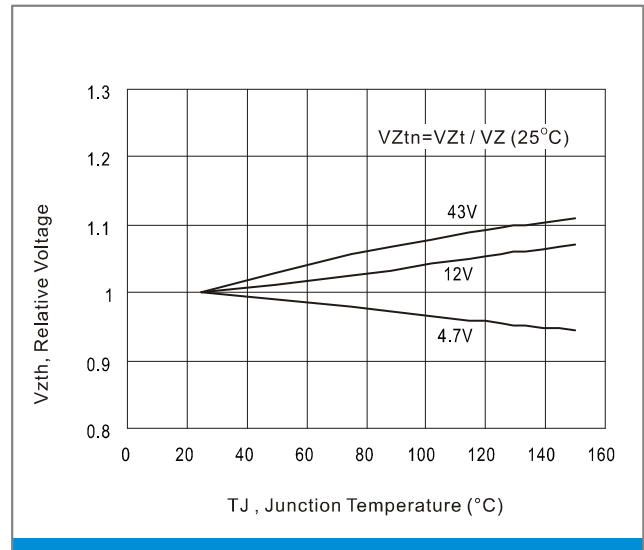
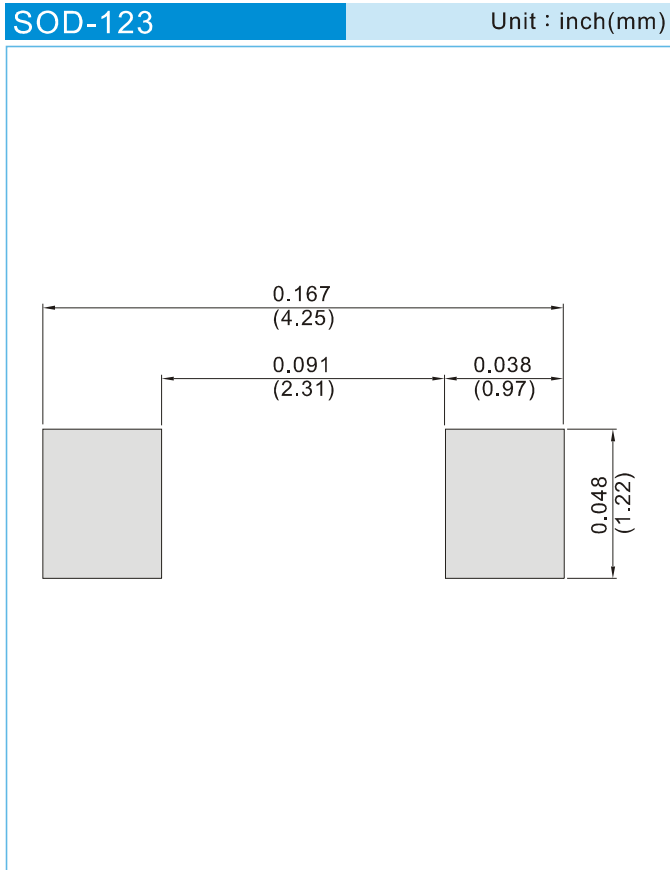


Fig.4 JUNCTION TEMPERATURE OF WORKING VOLTAGE VS. JUNCTION TEMPERATURE



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 10K per 13" plastic Reel
T/R - 3K per 7" plastic Reel



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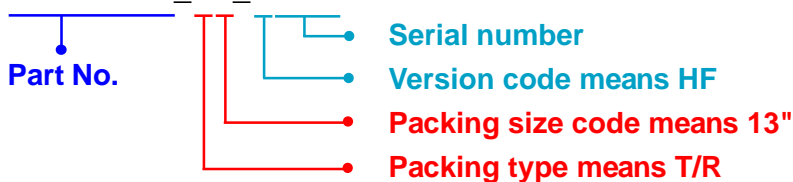
Part No_packing code_Version

MMSZ4687-V_R1_00001

MMSZ4687-V_R2_00001

For example :

RB500V-40_R2_00001



| Packing Code XX | | | | Version Code XXXXX | | |
|--------------------------------------|----------------------|----------------------------------|----------------------|---------------------------|----------------------|---------------------------------------|
| Packing type | 1 st Code | Packing size code | 2 nd Code | HF or RoHS | 1 st Code | 2 nd ~5 th Code |
| Tape and Ammunition Box (T/B) | A | N/A | 0 | HF | 0 | serial number |
| Tape and Reel (T/R) | R | 7" | 1 | RoHS | 1 | serial number |
| Bulk Packing (B/P) | B | 13" | 2 | | | |
| Tube Packing (T/P) | T | 26mm | X | | | |
| Tape and Reel (Right Oriented) (TRR) | S | 52mm | Y | | | |
| Tape and Reel (Left Oriented) (TRL) | L | PANASERT T/B CATHODE UP (PBCU) | U | | | |
| FORMING | F | PANASERT T/B CATHODE DOWN (PBCD) | D | | | |



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