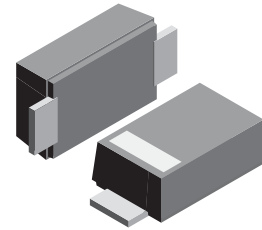


VOLTAGE RANGE: 1.8 - 43V
POWER: 0.5Watts

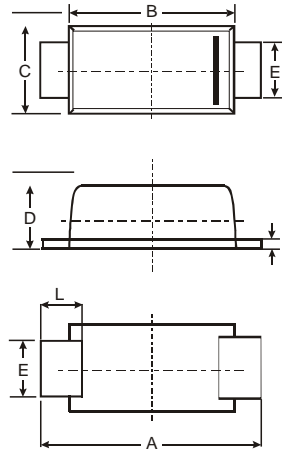
Features

- Package Designed for Optimal Automated Board Assembly
- Small Package Size for High Density Applications



Mechanical Data

- Case: SOD-123FL
plastic body over passivated junction
- Terminals : Plated axial leads,
- solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight:0.0007 ounce, 0.02 grams



| SOD-123FL | | | |
|----------------------|------|------|-------|
| Dim | Min | Max | Typ |
| A | 3.50 | 3.80 | 3.65 |
| B | 2.60 | 2.90 | 2.75 |
| C | 1.70 | 1.90 | 1.80 |
| D | 0.09 | 1.10 | 1.00 |
| E | 0.08 | 1.10 | 0.095 |
| H | 0.12 | 0.20 | 0.16 |
| L | 0.07 | 0.09 | 0.08 |
| All Dimensions in mm | | | |

Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise specified

| Parameter | Symbol | Value | Unit |
|--|-----------------|--------------------|---------------------------|
| Zener Current see Table "Characteristics" | | | |
| Total Power Dissipation on FR-5 Board, at $T_L = 75^\circ\text{C}$ | P_D | 500 ⁽¹⁾ | mW |
| Derated above 75°C | | 6.7 | mW/ $^\circ\text{C}$ |
| Maximum Forward Voltage at $I_F = 10\text{ mA}$ | V_F | 0.95 | V |
| Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | 340 | $^\circ\text{C}/\text{W}$ |
| Thermal Resistance Junction to Lead | $R_{\theta JL}$ | 150 | $^\circ\text{C}/\text{W}$ |
| Junction Temperature Range | T_J | -55 to + 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | -55 to + 150 | $^\circ\text{C}$ |

Note :

(1) FR-5 = 3.5 x 1.5 inches,using the minimum recommended footprint.

ELECTRICAL CHARACTERISTICS Rating at 25 °C ambient temperature unless otherwise specified.

| Type | Zener Voltage ^(1,2) | | | Test Current | Maximum Reverse Leakage Current | |
|----------|--------------------------------------|------|-------|--------------|---------------------------------|---------------------------------|
| | V _Z @ I _{ZT} (V) | | | | I _{ZT} | I _R @ V _R |
| | Min. | Nom. | Max. | (μA) | (μA) | (V) |
| MMSZ4678 | 1.71 | 1.8 | 1.89 | 50 | 7.5 | 1.0 |
| MMSZ4679 | 1.90 | 2.0 | 2.10 | 50 | 5.0 | 1.0 |
| MMSZ4680 | 2.09 | 2.2 | 2.31 | 50 | 4.0 | 1.0 |
| MMSZ4681 | 2.28 | 2.4 | 2.52 | 50 | 2.0 | 1.0 |
| MMSZ4682 | 2.565 | 2.7 | 2.835 | 50 | 1.0 | 1.0 |
| MMSZ4683 | 2.85 | 3.0 | 3.15 | 50 | 0.8 | 1.0 |
| MMSZ4684 | 3.13 | 3.3 | 3.47 | 50 | 7.5 | 1.5 |
| MMSZ4685 | 3.42 | 3.6 | 3.78 | 50 | 7.5 | 2.0 |
| MMSZ4686 | 3.70 | 3.9 | 4.10 | 50 | 5.0 | 2.0 |
| MMSZ4687 | 4.09 | 4.3 | 4.52 | 50 | 4.0 | 2.0 |
| MMSZ4688 | 4.47 | 4.7 | 4.94 | 50 | 10 | 3.0 |
| MMSZ4689 | 4.85 | 5.1 | 5.36 | 50 | 10 | 3.0 |
| MMSZ4690 | 5.32 | 5.6 | 5.88 | 50 | 10 | 4.0 |
| MMSZ4691 | 5.89 | 6.2 | 6.51 | 50 | 10 | 5.0 |
| MMSZ4692 | 6.46 | 6.8 | 7.14 | 50 | 10 | 5.1 |
| MMSZ4693 | 7.13 | 7.5 | 7.88 | 50 | 10 | 5.7 |
| MMSZ4694 | 7.79 | 8.2 | 8.61 | 50 | 1.0 | 6.2 |
| MMSZ4695 | 8.27 | 8.7 | 9.14 | 50 | 1.0 | 6.6 |
| MMSZ4696 | 8.65 | 9.1 | 9.56 | 50 | 1.0 | 6.9 |
| MMSZ4697 | 9.50 | 10 | 10.50 | 50 | 1.0 | 7.6 |
| MMSZ4698 | 10.45 | 11 | 11.50 | 50 | 0.05 | 8.4 |
| MMSZ4699 | 11.40 | 12 | 12.60 | 50 | 0.05 | 9.1 |
| MMSZ4700 | 12.35 | 13 | 13.65 | 50 | 0.05 | 9.8 |
| MMSZ4701 | 13.30 | 14 | 14.70 | 50 | 0.05 | 10.6 |
| MMSZ4702 | 14.25 | 15 | 15.75 | 50 | 0.05 | 11.4 |
| MMSZ4703 | 15.20 | 16 | 16.80 | 50 | 0.05 | 12.1 |
| MMSZ4704 | 16.15 | 17 | 17.85 | 50 | 0.05 | 12.9 |
| MMSZ4705 | 17.10 | 18 | 18.90 | 50 | 0.05 | 13.6 |
| MMSZ4706 | 18.05 | 19 | 19.95 | 50 | 0.05 | 14.4 |
| MMSZ4707 | 19.00 | 20 | 21.00 | 50 | 0.01 | 15.2 |
| MMSZ4708 | 20.90 | 22 | 23.10 | 50 | 0.01 | 16.7 |
| MMSZ4709 | 22.80 | 24 | 25.20 | 50 | 0.01 | 18.2 |
| MMSZ4710 | 23.75 | 25 | 26.25 | 50 | 0.01 | 19.0 |
| MMSZ4711 | 25.65 | 27 | 28.35 | 50 | 0.01 | 20.4 |
| MMSZ4712 | 26.60 | 28 | 29.40 | 50 | 0.01 | 21.2 |
| MMSZ4713 | 28.50 | 30 | 31.50 | 50 | 0.01 | 22.8 |
| MMSZ4714 | 31.35 | 33 | 34.65 | 50 | 0.01 | 25.0 |
| MMSZ4715 | 34.20 | 36 | 37.80 | 50 | 0.01 | 27.3 |
| MMSZ4716 | 37.05 | 39 | 40.95 | 50 | 0.01 | 29.6 |
| MMSZ4717 | 40.85 | 43 | 45.15 | 50 | 0.01 | 32.6 |