

Silicon Zener Diodes



Glass Axial Leaded

- Sharper Breakdown
- Lower Leakage Current Characteristics in the 4–10 Volt range and the 5–9 Volt range

The family of Aeroflex / Metelics Silicon Avalanche Diodes includes a variety of models in various voltage ranges. They feature sharp breakdown and low leakage LVA regulators. Certain models also feature exceptionally low noise, low impedance and sharp knees for high performance, low current applications.

Sharp Breakdown, Low Leakage LVA Regulator, 4–10 Volt Range

| Model | Voltage Vz @ Izt Vdc | Test Current Izt mA | Zener Impedance Zzt @ Izt Ω | Reverse Leakage Current MAX | | Noise Density @ 250 μ A |
|---------|-------------------------|------------------------|--|--------------------------------|--------------------|--------------------------------|
| | TYP | | MAX | I _R μ Adc | V _R Vdc | |
| LVA43A | 4.3 | 20 | 18 | 4.0 | 1.5 | 4 |
| LVA47A | 4.7 | 10 | 15 | 4.0 | 2.0 | 4 |
| LVA51A | 5.1 | 5 | 15 | 0.1 | 2.0 | 4 |
| LVA56A | 5.6 | 1 | 40 | 0.05 | 3.0 | 4 |
| LVA62A | 6.0 | 1 | 50 | 0.05 | 4.0 | 4 |
| LVA68A | 6.8 | 1 | 50 | 0.05 | 5.0 | 4 |
| LVA75A | 7.5 | 1 | 100 | 0.01 | 6.0 | 4 |
| LVA82A | 8.2 | 1 | 100 | 0.01 | 6.5 | 4 |
| LVA91A | 9.1 | 1 | 100 | 0.01 | 8.0 | 4 |
| LVA100A | 10.0 | 1 | 100 | 0.01 | 9.0 | 4 |

| Maximum Rating | Parameters | Value | Rating |
|----------------|-----------------------|----------------------|----------------------------------|
| | Package style | CS85 (DO-7) | |
| | Forward Voltage | @ If = 200 mAdc | 1.5 Vdc |
| | Noise Density | @ Iz = 250 μ Adc | 4.0 μ V / $\sqrt{\text{Hz}}$ |
| | Power Dissipation | @ Ta = 25° C | 400 mW |
| | Operating Temperature | | -65° C to + 175° C |
| | Storage Temperature | | -65° C to + 200° C |
| | Voltage Tolerance | Standard Device | ±10% |
| | Suffix A | ±5% | |
| | Suffix B | ±2% | |

Noise Density measured from 1000 to 3000 Hz.