

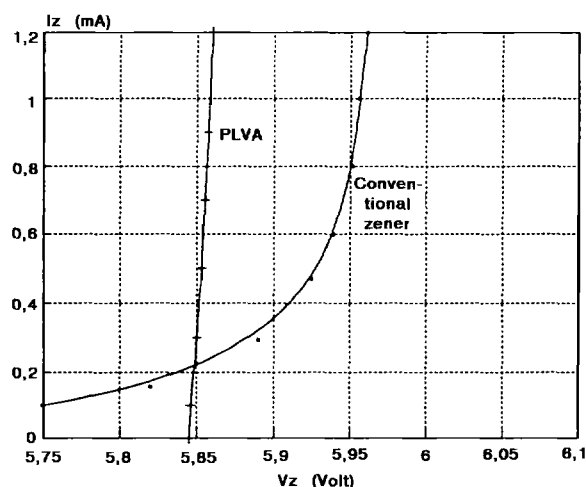
## Surface Mount Devices

### Low Voltage Avalanche (LVA) Zener Diodes

Unlike Conventional zener diodes, Philips low voltage avalanche diodes provide an extremely sharp zener characteristic in the microamp current range. This, in addition to low dynamic resistance, leakage current and noise level, makes the LVA diode an ideal choice for low current, low power, low noise applications. Additional information on these LVA diodes is available in Technical Publication SCO11 (PC688).

### LVA Zener Diodes, SOT-23 (250 mW)

| Type     | $V_z$ |     |     |                    | Maximum Differential Resistance $R_z$ at $I_z$ |         | Typical Temperature Coefficient $S_z$ at $I_z$ |         | Typical Reverse Current $I_R$ at $V_R$ |      |
|----------|-------|-----|-----|--------------------|--|---------|--|---------|--|------|
|          | V     |     |     | @ $I_z$<br>$\mu A$ | $\Omega$                                       | $\mu A$ | mV/K   | $\mu A$ | $\mu A$                                | V    |
|          | min   | typ | max |                    |  |         |  |         |  |      |
| PLVA650A | 4.8   | 5.0 | 5.2 | 250                | 700  | 250     | 0.2  | 250     | 21                                     | 4.5  |
| PLVA653A | 5.1   | 5.3 | 5.5 | 250                | 250  | 250     | 1.6  | 250     | 3.5                                    | 4.77 |
| PLVA656A | 5.4   | 5.6 | 5.8 | 250                | 100  | 250     | 1.9  | 250     | 1.3                                    | 5.04 |
| PLVA659A | 5.7   | 5.9 | 6.1 | 250                | 100  | 250     | 2.4  | 250     | 1.0                                    | 5.31 |
| PLVA662A | 6.0   | 6.2 | 6.4 | 250                | 100  | 250     | 2.65   | 250     | 0.05                                   | 5.58 |
| PLVA665A | 6.3   | 6.5 | 6.7 | 250                | 100  | 250     | 2.9  | 250     | 0.04                                   | 5.85 |
| PLVA668A | 6.6   | 6.8 | 7.0 | 250                | 100  | 250     | 3.4  | 250     | 0.006                                  | 6.12 |



Comparison of I-V characteristics for a typical PLVA and a conventional zener diode