

MELF-SMD 0.5 Watt

Applications

Used in general purpose regulation and protection, where space and surge capability are important.

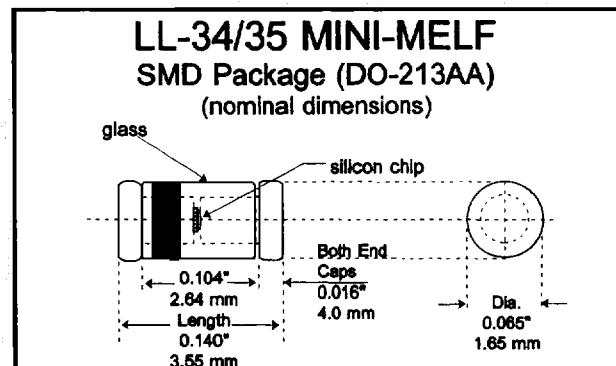
Features

- Six sigma quality
- High surge capability
- Humidity proof glass
- Metallurgically bonded
- Approved to Mil-S-19500/127
- DO-35 leaded glass types available

LL746A
thru
LL759A

Zener Diodes

(MELF available in MIL types up to JTXV1N746AUR-1 and to "S" levels via Source Control Drawings.)



| Absolute Maximum Ratings | Symbol | Value | Unit |
|--|------------------|-------------|------|
| Power Dissipation at end cap temperature = 75 °C | P _{tot} | 0.5 | Watt |
| Junction Temperature | T _j | 200 | °C |
| Operating and Storage Temperature Range | T _s | -65 to +200 | °C |

| Characteristics at T = 25 °C | Symbol | Limit | Unit |
|---|-----------------|-----------|-------|
| Power Derating at end cap temperature = 75 °C | P _{DR} | 4.0 (Max) | mW/°C |
| Forward Voltage at I _F = 200 mA | V _F | 1.1 (Max) | Volts |

| Type | Nominal Zener Voltage (V _Z) @ I _{Zt} Volts | Maximum Zener Impedance (Z _{Zt}) @ I _{Zt} Ohms | Test Current I _{Zt} mA | Typical Temperature Coefficient %/°C | Maximum Leakage Current (I _R) @ V _R = 1V 25°C μA | Maximum Leakage Current (I _R) @ V _R = 1V 150°C μA | Maximum Regulator Current (I _{ZM}) mA |
|--------|---|---|---------------------------------|--------------------------------------|---|--|---|
| LL746A | 3.3 | 28 | 20 | -0.062 | 10 | 30 | 110 |
| LL747A | 3.6 | 24 | 20 | -0.055 | 10 | 30 | 100 |
| LL748A | 3.9 | 23 | 20 | -0.049 | 10 | 30 | 95 |
| LL749A | 4.3 | 22 | 20 | -0.036 | 2 | 30 | 85 |
| LL750A | 4.7 | 19 | 20 | -0.018 | 2 | 30 | 75 |
| LL751A | 5.1 | 17 | 20 | -0.008 | 1 | 20 | 70 |
| LL752A | 5.6 | 11 | 20 | 0.006 | 1 | 20 | 65 |
| LL753A | 6.2 | 7 | 20 | 0.022 | 0.1 | 20 | 60 |
| LL754A | 6.8 | 5 | 20 | 0.035 | 0.1 | 20 | 55 |
| LL755A | 7.5 | 6 | 20 | 0.045 | 0.1 | 20 | 50 |
| LL756A | 8.2 | 8 | 20 | 0.052 | 0.1 | 20 | 45 |
| LL757A | 9.1 | 10 | 20 | 0.056 | 0.1 | 20 | 40 |
| LL758A | 10.0 | 17 | 20 | 0.060 | 0.1 | 20 | 35 |
| LL759A | 12.0 | 30 | 20 | 0.060 | 0.1 | 20 | 30 |

Voltage tolerance is ± 5%. Non-suffix is ± 10% tolerance.

To order Mil types; replace "LL" with a JAN1N, JTX1N or JTXV1N prefix and add a UR-1 suffix to the listed numbers.
DO-35 leaded glass package available in commercial and military versions, use 1N in place of the LL prefix.