

LL5711 and LL6263

V_{RRM} : 70V , 60V

FEATURES :

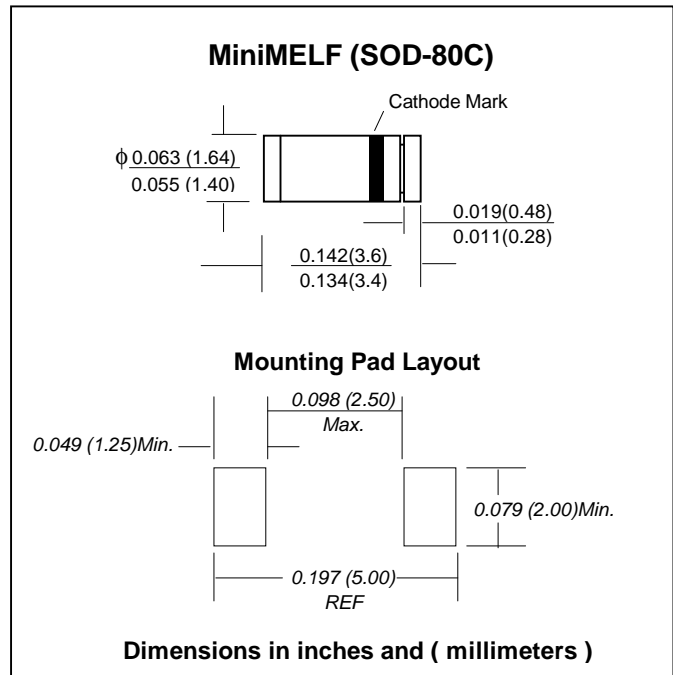
- For general purpose applications
- Metal-on-silicon Schottky barrier device which is protected by a PN junction guard ring. The low forward voltage drop and fast switching make it ideal for protection of MOS devices, steering, biasing and coupling diodes for fast switching and low logic level applications.
- This diode is also available in the DO-35 case with type designation 1N5711 and 1N6263.
- **Pb / RoHS Free**

MECHANICAL DATA :

Case: MiniMELF Glass Case (SOD-80C)

Weight: approx. 0.05g

SCHOTTKY BARRIER DIODES



Maximum Ratings and Thermal Characteristics (Rating at 25 °C ambient temperature unless otherwise specified.)

| Parameter | Symbol | Value | Unit |
|--|------------------|-----------------------------|------|
| Repetitive Peak Reverse Voltage | LL5711 | 70 | V |
| | LL6263 | 60 | |
| Power Dissipation (Infinite Heatsink) | P _D | 400 ⁽¹⁾ | mW |
| Maximum Single Cycle Surge 10 μs Square Wave | I _{FSM} | 2.0 | A |
| Junction Temperature | T _J | 125 ⁽¹⁾ | °C |
| Storage temperature range | T _S | -55 to + 150 ⁽¹⁾ | °C |

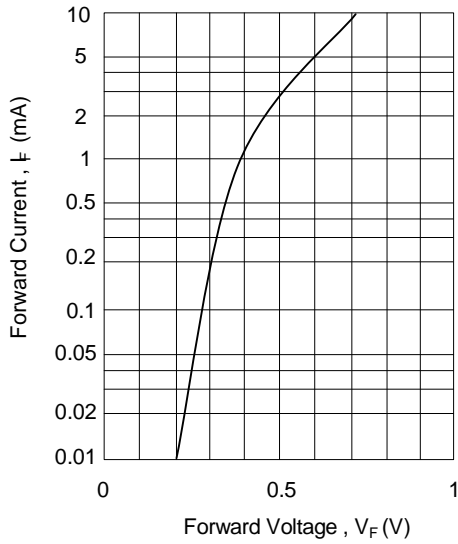
Electrical Characteristics (T_J = 25°C unless otherwise noted)

| Parameter | Symbol | Test Condition | Min | Typ | Max | Unit |
|---------------------------|-----------------|---|-----|-----|------|------|
| Reverse Breakdown Voltage | LL5711 | I _R = 10 μA | 70 | - | - | V |
| | LL6263 | | 60 | - | - | |
| Reverse Current | I _R | V _R = 50 V | - | - | 200 | nA |
| Forward Voltage Drop | V _F | I _F = 1mA | - | - | 0.41 | V |
| | | I _F = 15mA | - | - | 1.0 | |
| Diode Capacitance | Cd | V _R = 0 V, f = 1MHz | - | - | 2.0 | pF |
| | | | - | - | 2.2 | |
| Reverse Recovery Time | T _{rr} | I _F = I _R = 5mA, recover to 0.1I _R | - | - | 1.0 | ns |

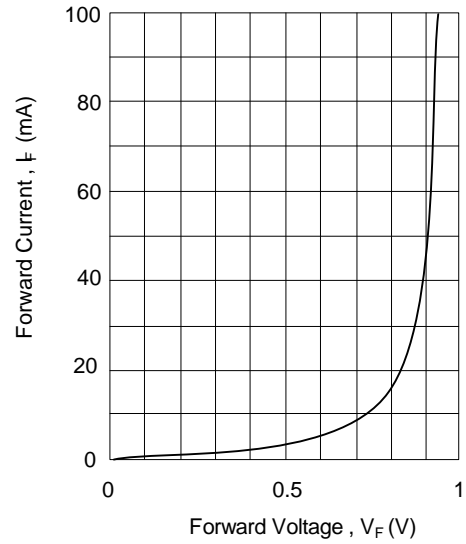
Note: (1) Valid provided that electrodes are kept at ambient temperature

RATING AND CHARACTERISTIC CURVES (LL5711 and LL6263)

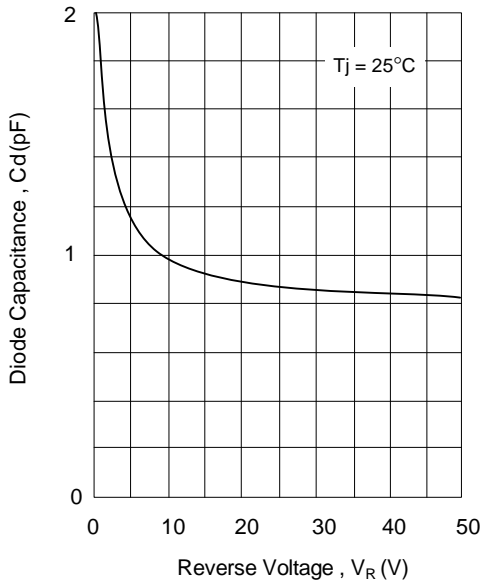
Typical variation of forward current and forward voltage for primary conduction through the schottky barrier



Typical forward conduction curve of combination schottky barrier and PN junction guard ring



Typical capacitance curve as a function of reverse voltage



Typical variation of reverse current at various temperatures

