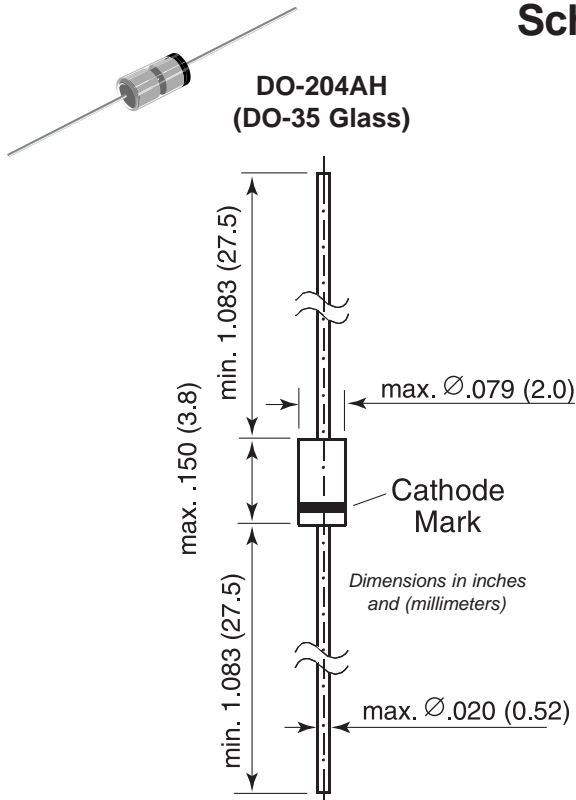


Schottky Diodes



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 MiniMELF case with type designation LL5711 and LL6263.

Mechanical Data

Case: DO-35 Glass Case

Weight: approx. 0.13g

Packaging Codes/Options:

D7/10K per 13" reel (52mm tape), 20K/box

D8/10K per Ammo tape (52mm tape), 20K/box

Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

| Parameter | Symbol | Value | Unit | |
|--|------------------|----------------------------|----------|---|
| Peak Inverse Voltage | 1N5711 1N6263 | V _{RRM} | 70 60 | V |
| Power Dissipation (Infinite Heatsink) | P _{tot} | 400 ⁽¹⁾ | mW | |
| Maximum Single Cycle Surge 10 μs Square Wave | I _{FSM} | 2.0 | A | |
| Thermal Resistance Junction to Ambient Air | R _{θJA} | 0.3 ⁽¹⁾ | °C/mW | |
| 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 | 1N5711 1N6263 | V _{(BR)R} | I _R = 10μA | 70 60 | — — | V | |
| Leakage Current | I _R | V _R = 50V | — | — | 200 | nA | |
| Forward Voltage Drop | V _F | I _F = 1mA I _F = 15mA | — — | — — | 0.41 1.0 | V | |
| Junction Capacitance | 1N5711 1N6263 | C _{tot} | V _R = 0V, f = 1MHz | — | — | 2.0 2.2 | pF |
| Reverse Recovery Time | t _{rr} | I _F = I _R = 5mA, recover to 0.1I _R | — | — | 1 | ns | |

Note: (1) Valid provided that leads at a distance of 4mm from case are kept at ambient temperature.

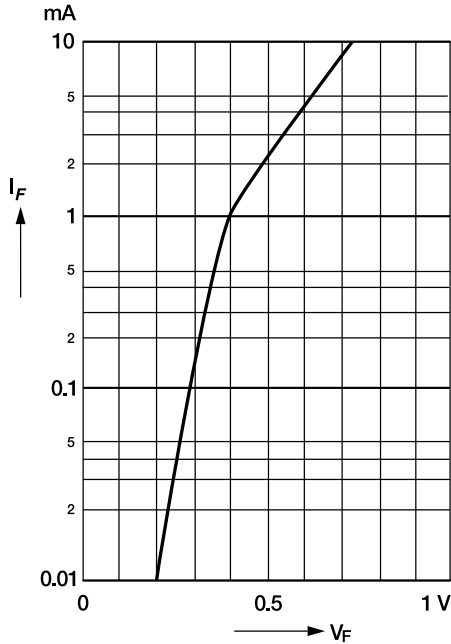
1N5711 and 1N6263

Vishay Semiconductors
formerly General Semiconductor

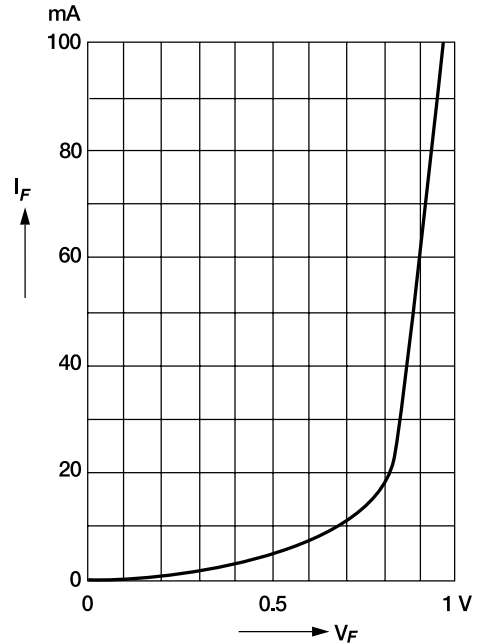


Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

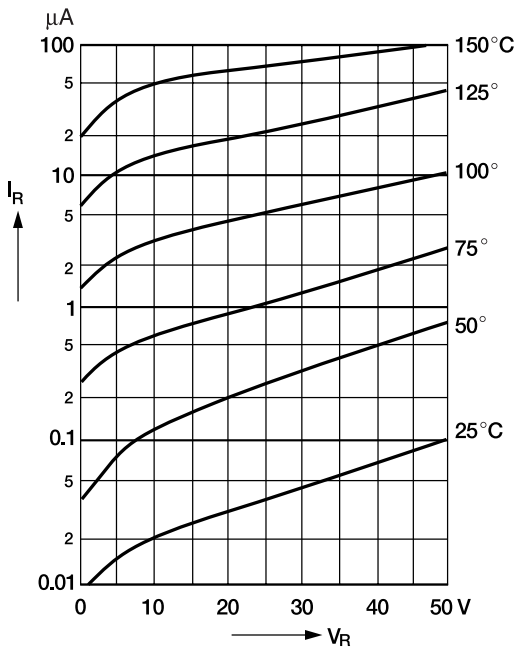
Typical variation of fwd. current vs. fwd. voltage for primary conduction through the Schottky barrier



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



Typical variation of reverse current at various temperatures



Typical capacitance curve as a function of reverse voltage

