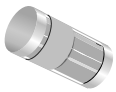
GENERAL SEMICONDUCTOR®

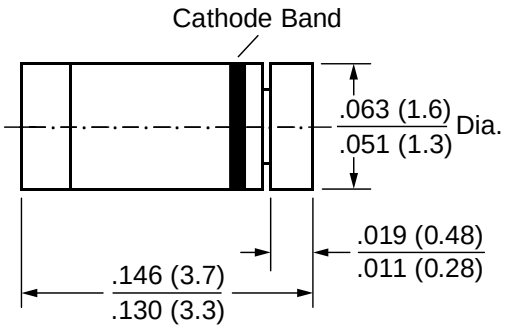
LL5711 and LL6263

Schottky Diodes



New Product

MiniMELF (SOD-80C)



Dimensions in inches and (millimeters)

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.

Mechanical Data

Case: MiniMELF Glass Case (SOD-80C)
Weight: approx. 0.05g
Cathode Band Color: Green
Packaging Codes/Options:
D1/10K per 13” reel (8mm tape)
D2/2.5K per 7” reel (8mm tape)

Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter		Symbol	Value	Unit
Peak Inverse Voltage	LL5711 LL6263	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
Junction Temperature		T_j	125	°C
Storage Temperature Range		T_S	–55 to +150	°C

Electrical Characteristics

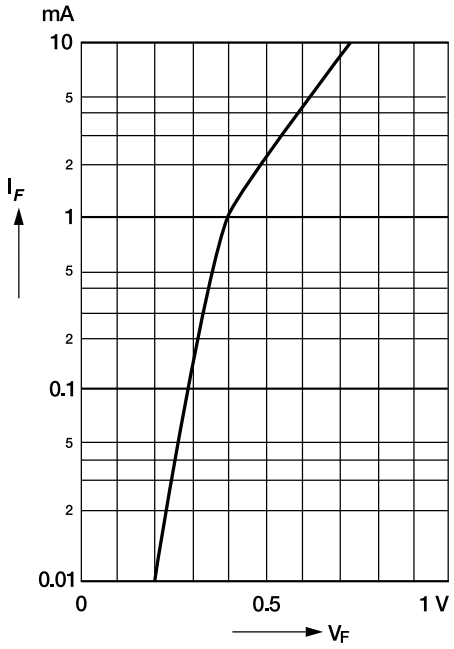
(T_J = 25°C unless otherwise noted)

Parameter		Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage	LL5711 LL6263	$V_{(BR)R}$	I_R = 10μA	70 60	— —	— —	V
Leakage Current		I_R	V_R = 50V	—	—	200	nA
Forward Voltage Drop		V_F	I_F = 1.0mA I_F = 15mA	— —	— —	0.41 1.0	V
Junction Capacitance		C_{tot}	V_R = 0V, f = 1MHz	—	—	2.0	pF
Reverse Recovery Time		t_{rr}	I_F = I_R = 5mA, recover to 0.1I_R	—	—	1	ns

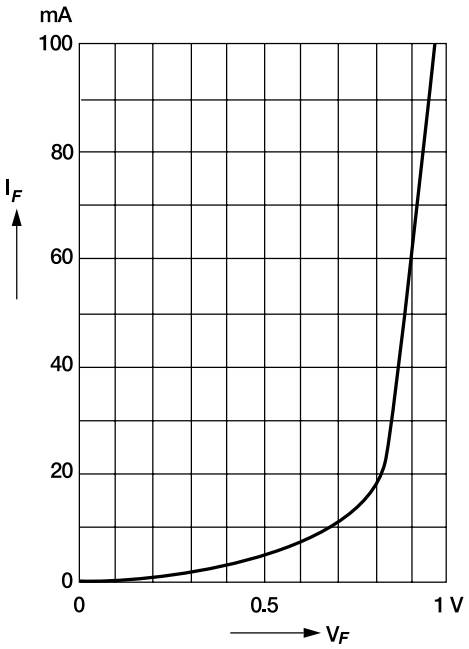
Note: (1) Valid provided that electrodes are kept at ambient temperature.

Ratings and Characteristic Curves (TA = 25°C unless otherwise noted)

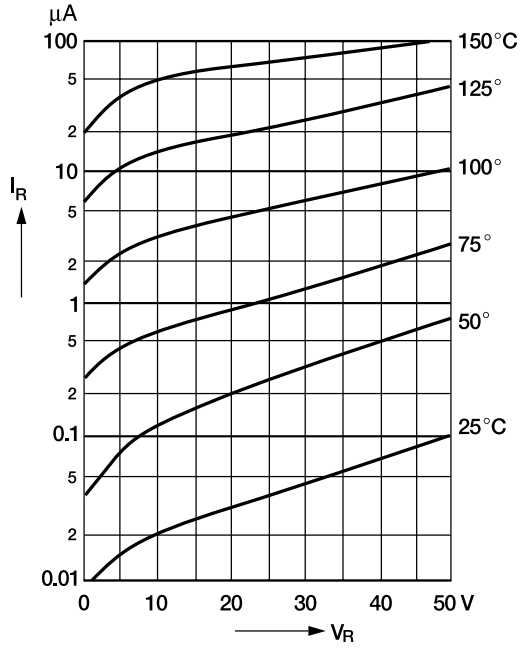
Typical variation of fwd. current vs. fwd. voltage for primary conduction through the Schottky barrier



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