

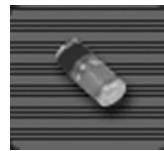


LL5711 and LL6263

Small-Signal Diode
Schottky Diodes

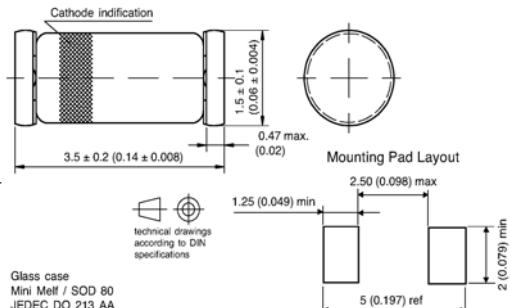
Features

- ◆ 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 DO-35 case with type designation 1N5711 and 1N6263.



Mechanical Data

- ◆ Case: MiniMELF Glass Case (SOD-80)
- ◆ Weight: approx. 0.05g
- ◆ Cathode Band Color: Green



Maximum Ratings and Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Unit
Peak inverse voltage LL5711 LL6263	V_{RRM}	70 60	Volts
Power dissipation (Infinite heatsink)	P_{tot}	400 ⁽¹⁾	mW
Maximum single cycle surge 10 us square wave	I_{FSM}	2.0	Amps
Junction temperature	T_j	125	°C
Storage temperature range	T_s	-55 to +150	°C

Electrical Characteristics

($T_j=25^\circ\text{C}$ unless otherwise noted.)

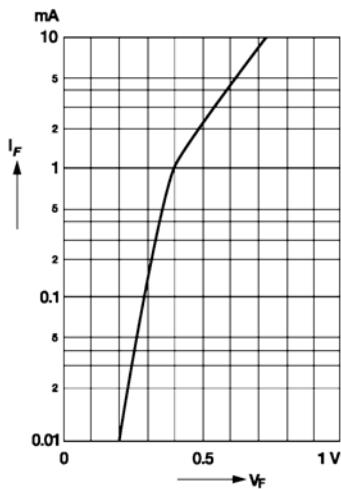
Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse breakdown voltage LL5711 LL6263	$V_{(BR)R}$	$I_R=10\mu\text{A}$	70 60	- -	- -	Volts
Leakage current	I_R	$V_R=50\text{V}$	-	-	200	nA
Forward voltage drop	V_F	$I_F=1.0\text{mA}$ $I_F=15\text{mA}$	- -	- -	0.41 1.0	Volt
Junction capacitance	C_{tot}	$V_R=0\text{V}$, $f=1\text{MHz}$	-	-	2.2	pF
Reverse recovery time	t_{rr}	$I_F=I_R=5\text{mA}$, recover to $0.1I_R$	-	-	1	ns

Notes: 1. Valid provided that electrodes are kept at ambient temperature.

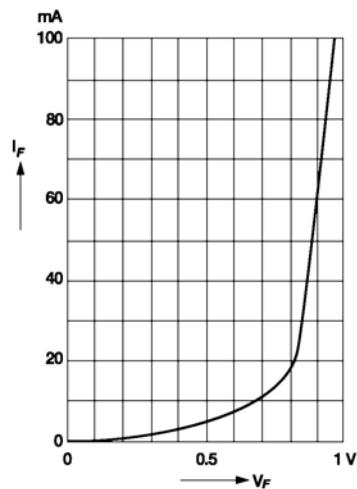
RATINGS AND CHARACTERISTIC CURVES

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

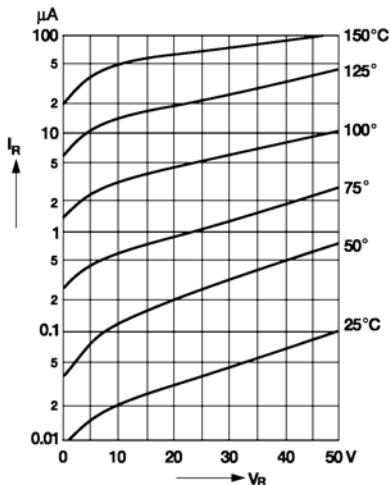
Typical variation of fwd. current
vs. fwd. voltage for primary conduction
through the Schottky barrier



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

