



1N5711 and 1N6263

Small-Signal Diode
Schottky Diodes

Features

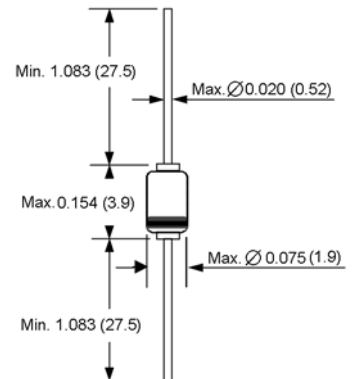
- ◆ For general purpose applications
- ◆ Metal-on-silicon Schottky barrier device which is protected by a PN junction guard ring. The low forward voltage drop and fast switching make it ideal for protection of MOS devices, steering, biasing and coupling diodes for fast switching and low logic level applications.
- ◆ This diode is also available in the MiniMELF case with type designation LL5711 and LL6263.



DO-204AH (DO-35 Glass)

Mechanical Data

- ◆ Case: DO-35 Glass Case
- ◆ Weight: approx. 0.13g



Dimensions in inches and (millimeters)

Maximum Ratings and Thermal Characteristics

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

Parameter	Symbol	Value	Unit
Peak inverse voltage	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
Thermal resistance junction to ambient air	$R_{\theta JA}$	0.3 ⁽¹⁾	°C/mW
Junction temperature	T_j	125 ⁽¹⁾	°C
Storage temperature range	T_s	-55 to +150 ⁽¹⁾	°C

Electrical Characteristics

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

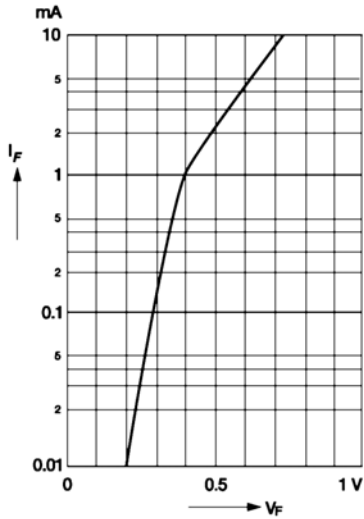
Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=10\mu\text{A}$	70 60	-	-	Volts
Leakage current	I_R	$V_R=50\text{V}$	-	-	200	nA
Forward voltage drop	V_F	$I_F=1\text{mA}$ $I_F=15\text{mA}$	-	-	0.41 1.0	Volt
Junction capacitance	C_{tot}	$V_R=0\text{V}$, $f=1\text{MHz}$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

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

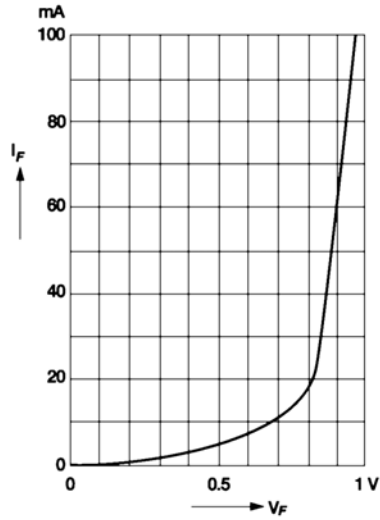
RATINGS AND CHARACTERISTIC CURVES

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

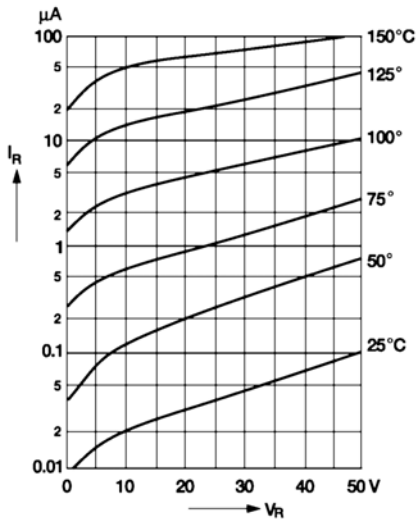
Typical variation of fwd. current vs. fwd. voltage for primary conduction through the Schottky barrier



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

