



# Schottky Barrier Diode

## Features

1. For general purpose applications.
2. 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.



## Absolute Maximum Ratings ( $T_j=25^{\circ}\text{C}$ )

Parameter	Part	Symbol	Value	Unit
Peak inverse voltage	LL5711	$V_{RRM}$	70	V
	LL6263	$V_{RRM}$	60	V
Maximum single cycle surge 10us square wave		$I_{FSM}$	2.0	A
Power dissipation		$P_{tot}$	400	mW
Maximum junction temperature		$T_j$	125	$^{\circ}\text{C}$
Storage temperature range		$T_s$	-55~+150	$^{\circ}\text{C}$

## Electrical Characteristics ( $T_j=25^{\circ}\text{C}$ )

Parameter	Symbol	Test Conditions	Part	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=10\mu\text{A}$ (pulsed)	LL5711	70	-	-	V
			LL6263	60	-	-	v
Leakage current	$I_R$	$V_R=50\text{V}$		-	-	200	nA
Forward voltage drop	$V_F$	$I_F=1\text{mA}$		-	-	0.41	V
		$I_F=15\text{mA}$		-	-	1.0	V
Junction capacitance	$C_{tot}$	$V_R=0\text{V}$ , $f=1\text{MHz}$	LL5711	-	-	2.0	pF
			LL6263	-	-	2.2	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=5\text{mA}$ recover to $0.1 I_R$		-	-	1.0	ns

Stresses exceeding maximum ratings may damage the device. Maximum ratings are stress ratings only. Functional operation above the recommended operating conditions is not implied. Extended exposure to stresses above the recommended operating conditions may affect device reliability.

**Excel Semiconductor**



Characteristics ( $T_j=25^\circ\text{C}$  unless otherwise specified)

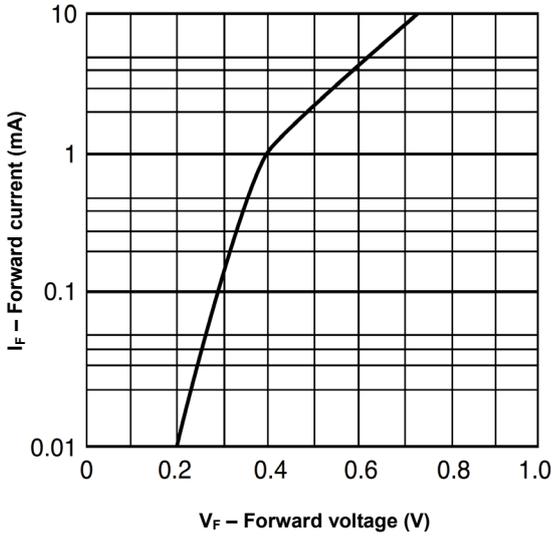


Figure 1. Typical variation of forward current vs. forward voltage

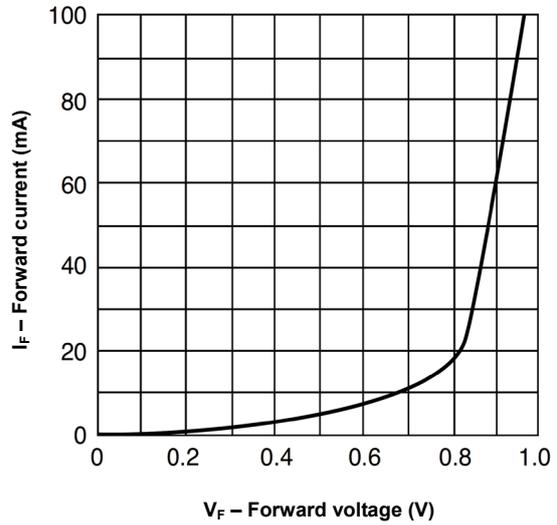


Figure 2. Typical forward conduction curve

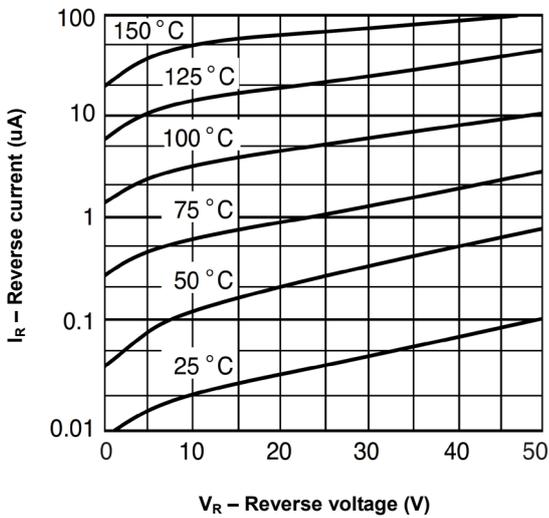


Figure 3. Typical variation of reverse current at various temperatures

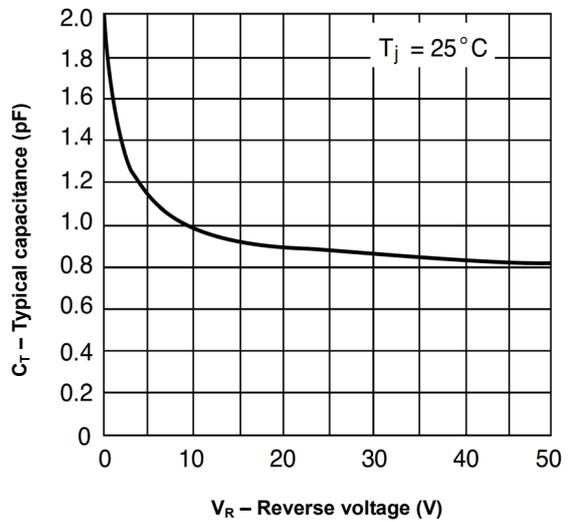
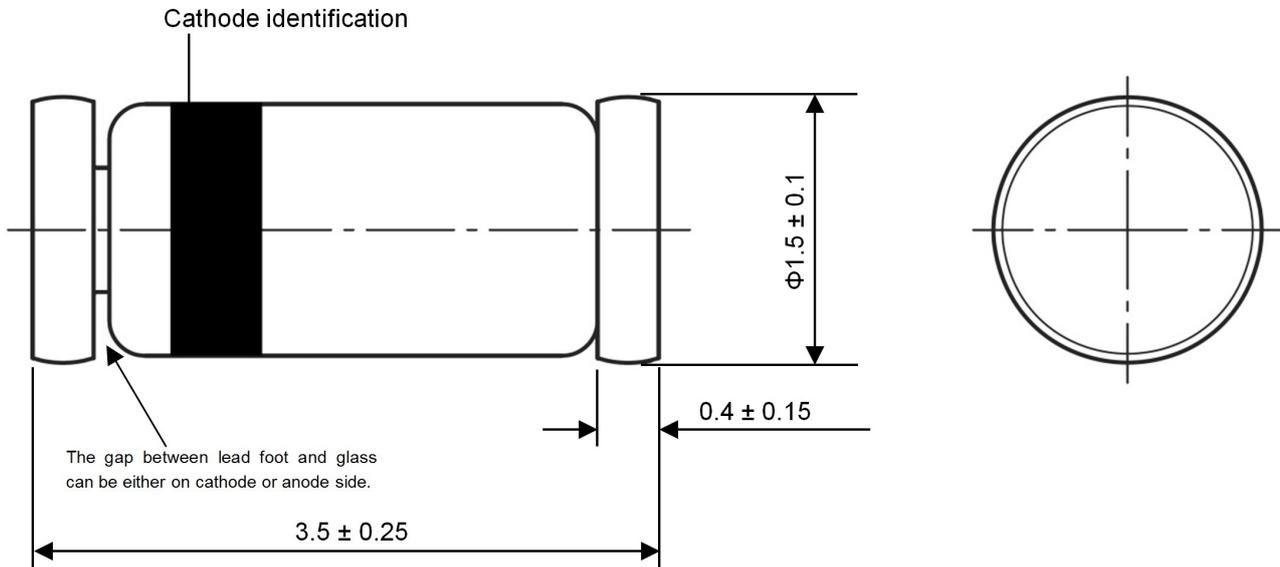


Figure 4. Typical capacitance curve as a function of reverse voltage



**Dimensions in mm**



Glass Case  
Mini Melf / SOD-80  
JEDEC DO-213 AA