



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)

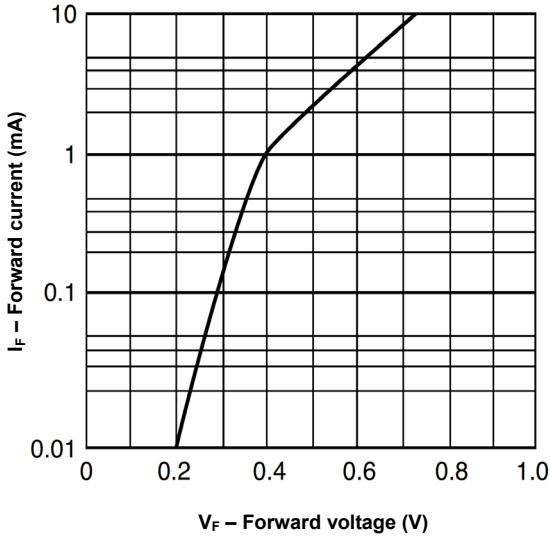


Figure 1. Typical variation of forward current vs. forward voltage

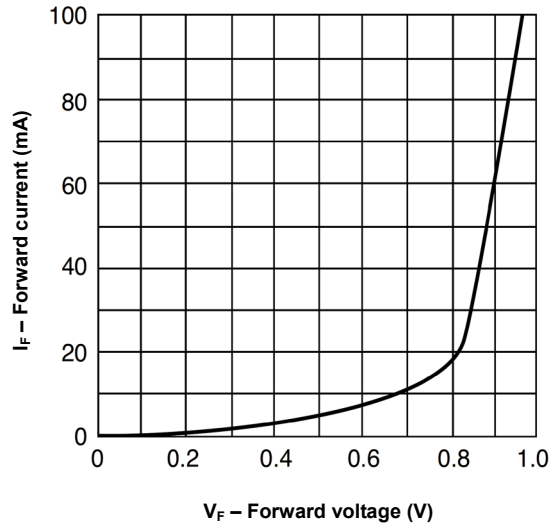


Figure 2. Typical forward conduction curve

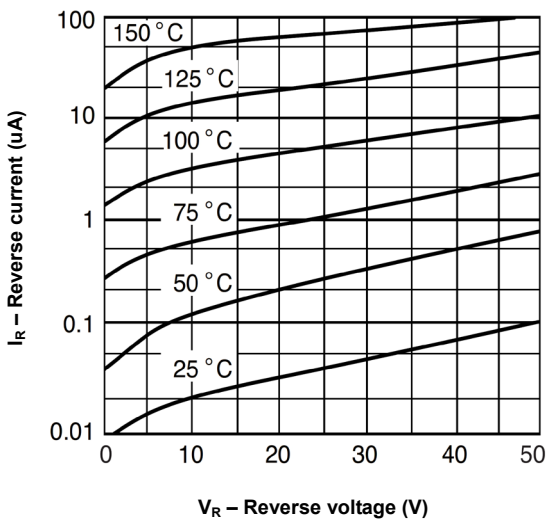


Figure 3. Typical variation of reverse current at various temperatures

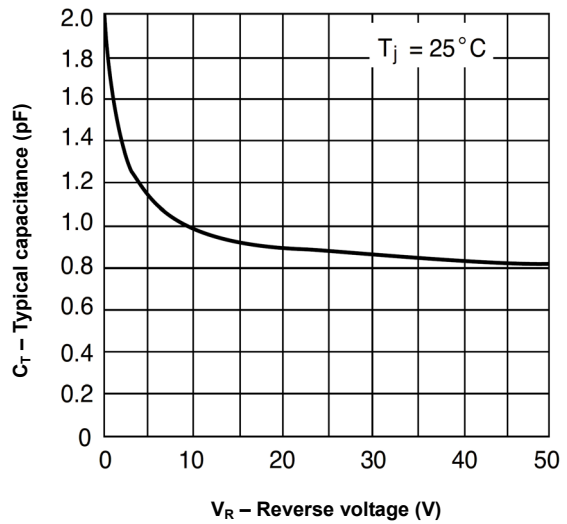
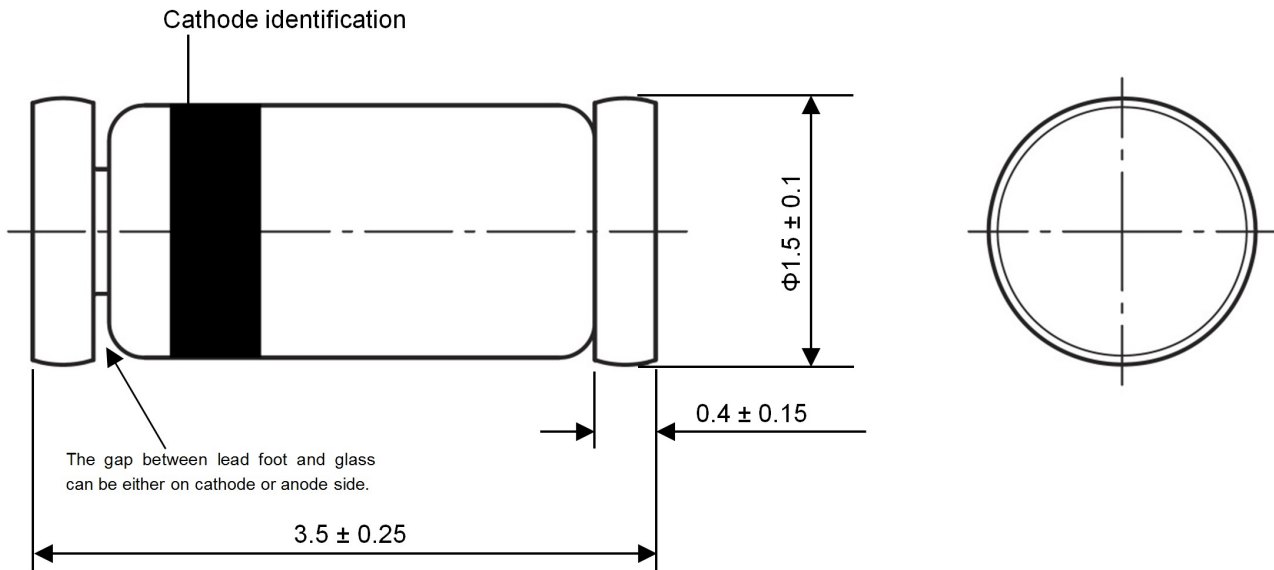


Figure 4. Typical capacitance curve as a function of reverse voltage



Dimensions in mm



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