

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.
3. This diode is also available in the Mini MELF case with type designation LL5711 and LL6263.



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

Parameter	Part	Symbol	Value	Unit
Peak inverse voltage	1N5711	V_{RRM}	70	V
	1N6263	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)	1N5711	70	-	-	V
			1N6263	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}	$V_R=0\text{V}$, $f=1\text{MHz}$	1N5711	-	-	2.0	pF
			1N6263	-	-	2.2	pF
Reverse recovery time	t_{rr}	$I_F=I_R=5\text{mA}$ recover to $0.1 I_R$		-	-	1.0	ns

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

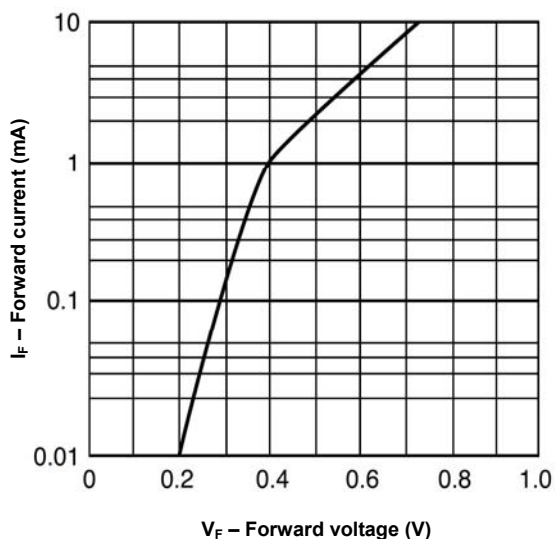


Figure 1. Typical variation of forward current vs. forward voltage

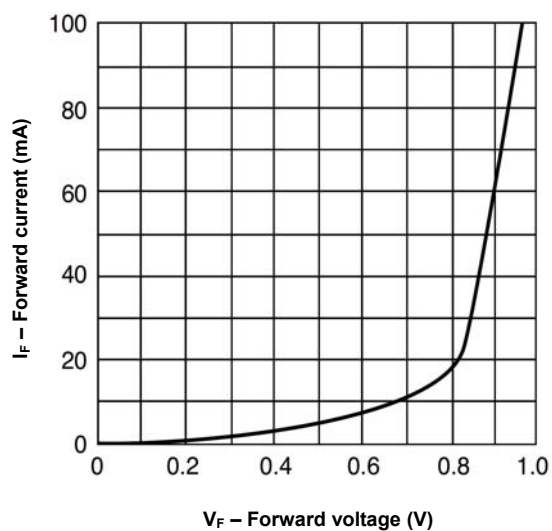


Figure 2. Typical forward conduction curve

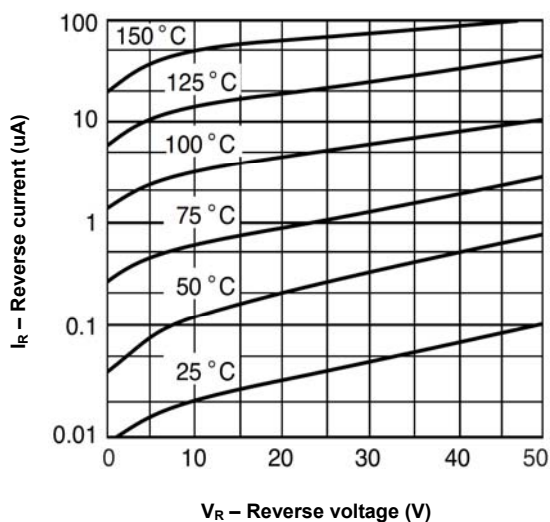


Figure 3. Typical variation of reverse current at various temperatures

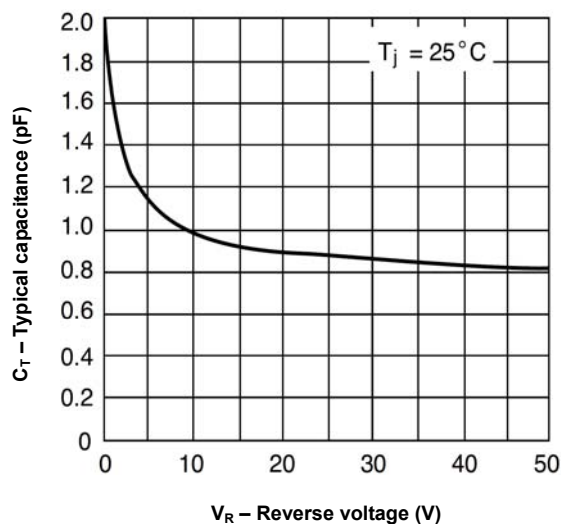
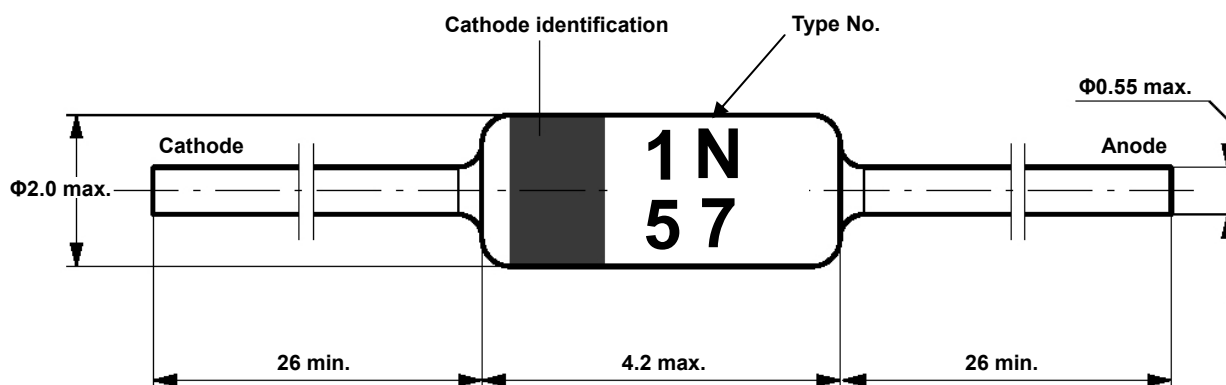


Figure 4. Typical capacitance curve as a function of reverse voltage

Dimensions in mm



Standard Glass Case
JEDEC DO 35

Marking

