

# 1N5711 and 1N6263

$V_{RRM} : 70V , 60V$

## FEATURES :

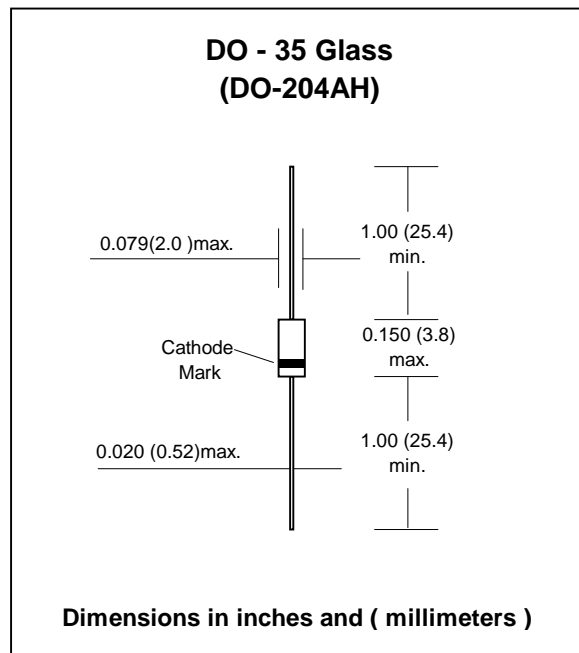
- For general purpose applications
- Metal-on-silicon Schottky barrier device which is protected by a PN junction guard ring. The low forward voltage drop and fast switching make it ideal for protection of MOS devices, steering, biasing and coupling diodes for fast switching and low logic level applications.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

## MECHANICAL DATA :

**Case:** DO-35 Glass Case

**Weight:** approx. 0.13g

## SCHOTTKY BARRIER DIODES



## Maximum Ratings and Thermal Characteristics (Rating at 25 °C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	70	V
		60	
Power Dissipation (Infinite Heatsink)	$P_D$	400 <sup>(1)</sup>	mW
Maximum Single Cycle Surge 10 $\mu$ s Square Wave	$I_{FSM}$	2	A
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	0.3 <sup>(1)</sup>	°C/mW
Junction Temperature	$T_J$	125 <sup>(1)</sup>	°C
Storage temperature range	$T_S$	-55 to + 150 <sup>(1)</sup>	°C

## Electrical Characteristics ( $T_J = 25^\circ\text{C}$ unless otherwise noted)

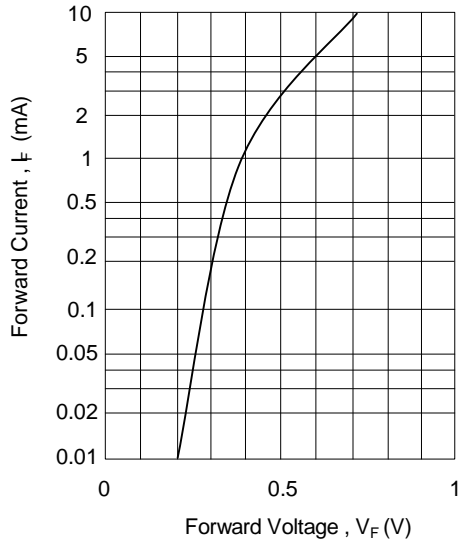
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R = 10 \mu\text{A}$	70	-	-	V
			60	-	-	
Reverse Current	$I_R$	$V_R = 50 \text{ V}$	-	-	200	nA
Forward Voltage Drop	$V_F$	$I_F = 1\text{mA}$ $I_F = 15\text{mA}$	-	-	0.41 1.0	V
Diode Capacitance	$C_d$	$V_R = 0 \text{ V}, f = 1\text{MHz}$	-	-	2.0 2.2	pF
Reverse Recovery Time	$T_{rr}$	$I_F = I_R = 5\text{mA}$ , recover to $0.1I_R$	-	-	1	ns

**Note:**

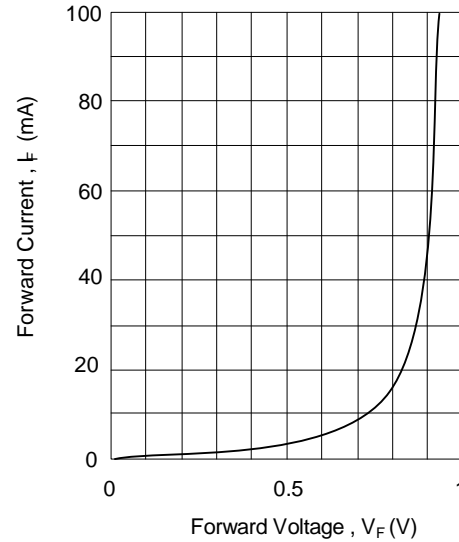
(1) Valid provided that leads at a distance of 4mm from case are kept at ambient temperature..

### RATING AND CHARACTERISTIC CURVES ( 1N5711 and 1N6263 )

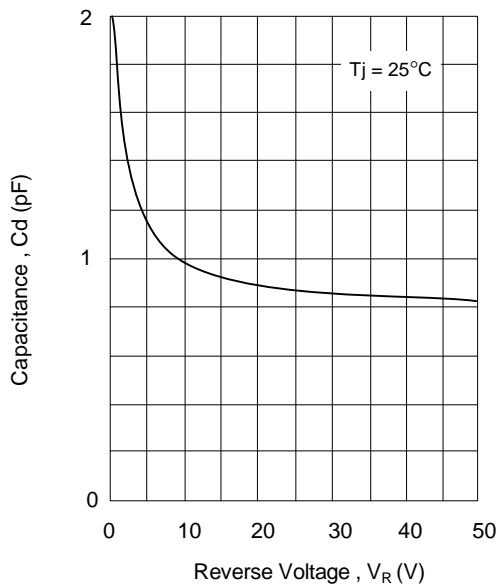
Typical variation of forward current and forward voltage for primary conduction through the schottky barrier



Typical forward conduction curve of combination schottky barrier and PN junction guard ring



Typical capacitance curve as a function of reverse voltage



Typical variation of reverse current at various temperatures

