



SEMICONDUCTOR

# 1N5711, 1N6263

## SMALL SIGNAL SCHOTTKY DIODES

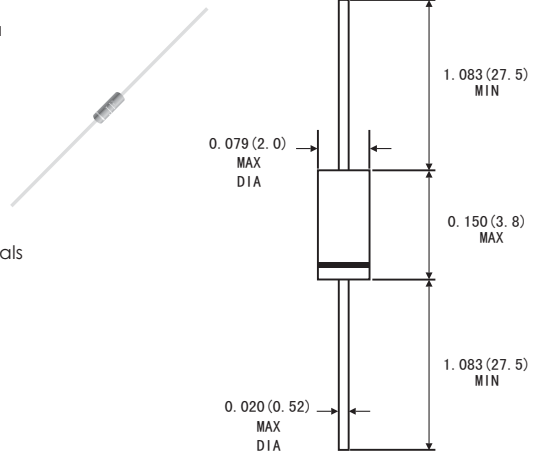
### FEATURES

- For general purpose applications
- Metal-on-silicon junction 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
- These diodes are also available in the MinMELF case with type designation LL5711 and LL6263.
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

### MECHANICAL DATA

- Case: DO-35 glass case
- Polarity: Color band denotes cathode end
- Weight: Approx. 0.13 gram

### DO-35



Dimensions in inches and (millimeters)

### ABSOLUTE RATINGS (LIMITING VALUES)

		Symbols	Value	Units
Peak Reverse Voltage	1N5711	$V_{RRM}$	70	V
	1N6263	$V_{RRM}$	60	V
Power Dissipation (infinite Heat Sink)		$P_{tot}$	400 <sup>1)</sup>	mW
Forward Continuous Current	$T_A=25^\circ\text{C}$	$I_F$	15	mA
Maximum Single cycle surge 10ms square wave		$I_{FSM}$	2.0	A
Junction Temperature		$T_J$	150	$^\circ\text{C}$
Storage Temperature Range		$T_{STG}$	-55 to +150	$^\circ\text{C}$

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

### ELECTRICAL CHARACTERISTICS

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

		Symbols	Min.	Typ.	Max.	Units
Reverse breakover voltage at $I_R=10\text{mA}$	1N5711	$V_R$	70			V
	1N6263	$V_R$	60			V
Leakage current at $V_R=50\text{V}$		$I_R$			200	nA
Forward voltage drop at $I_F=1\text{mA}$		$V_F$			0.41	V
	$I_F=15\text{mA}$	$V_F$			1.0	V
Junction Capacitance at $V_R=0\text{V}$ , $f=1\text{MHz}$		$C_J$			2.0	pF
Reverse Recovery time at $I_R=I_{RM}$ , recover to 0.1 $I_R$		$t_{rr}$			1	ns
Thermal resistance		$R_{\theta JA}$			400	$^\circ\text{C/W}$

## RATINGS AND CHARACTERISTICS CURVES 1N5711 AND 1N6263

Fig.1 Typical variation of fwd. current vs forward. voltage for primary conduction through the Schottky barrier

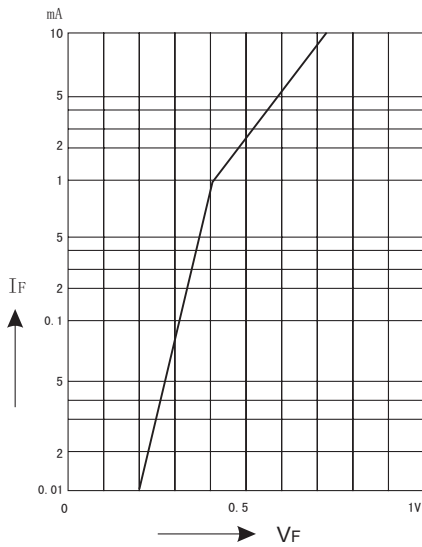


Fig.2 Typical forward conduction curve of combination Schottky barrier and PN junction guard ring

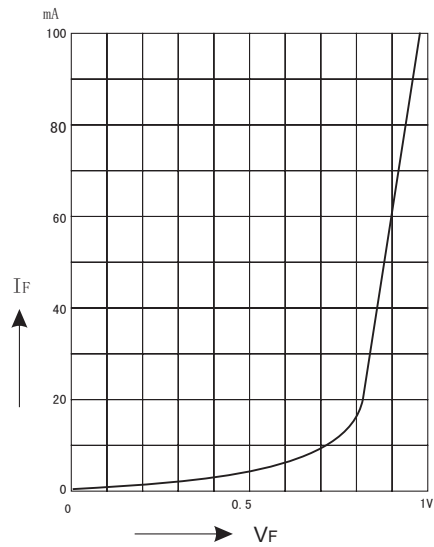


Fig.3 Typical variation of reverse current at various temperatures

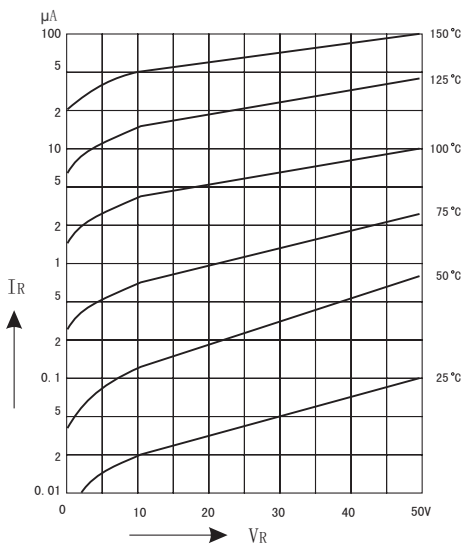


Fig.4 Typical capacitance curve as a function of reverse voltage

