

1N5711 THUR 1N6263

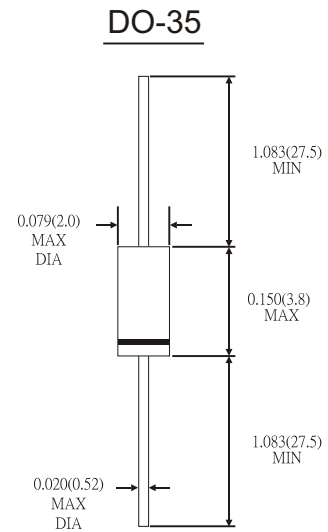
SMALL SIGNAL SCHOTTKY DIODES

FEATURES

- 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 Mini-MELF case with type designation 1L5711 and 1L6263

MECHANICAL DATA

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



Dimensions in inches and (millimeters)

ABSOLUTE RATINGS(LIMITING VALUES)

	<i>Symbols</i>	<i>Value</i>	<i>Units</i>
Peak Reverse Voltage	<i>1N5711</i> <i>1N6263</i> V_{RRM}	60 70	V
Power Dissipation (infinite Heat Sink)	P_{tot}	40 ¹⁾	mW
Maximum Single cycle surge 10 μ s square wave	I_{FSM}	2.0	mW
Junction Temperature	T_J	125	$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}C$

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

ELECTRICAL CHARACTERISTICS

(Ratings at 25 $^{\circ}C$ ambient temperature unless otherwise specified)

	<i>Symbols</i>	<i>Min.</i>	<i>Typ.</i>	<i>Max.</i>	<i>Units</i>
Reverse breakover voltage at $I_R = 10 \mu A$	<i>1N5711</i> <i>1N6263</i> V_R	70 60			V
Leakage current at $V_R = 50V$	I_R			20.0	nA
Forward voltage drop at $I_F = 1mA$ $I_F = 15mA$	V_F V_F			0.41 1.0	V
Junction Capacitance at $V_R = 0V, f = 1MHz$	C_J			2.0	pF
Reverse Recovery time at $I_F = I_R = 5mA$, recover to 0.1 I_R	t_{rr}			1	ns
Thermal resistance	R_{JA}			0.3	K/mW

Fig1 Typical variation of fwd. current vs forward voltage for primary conduction through the Schottky barrier

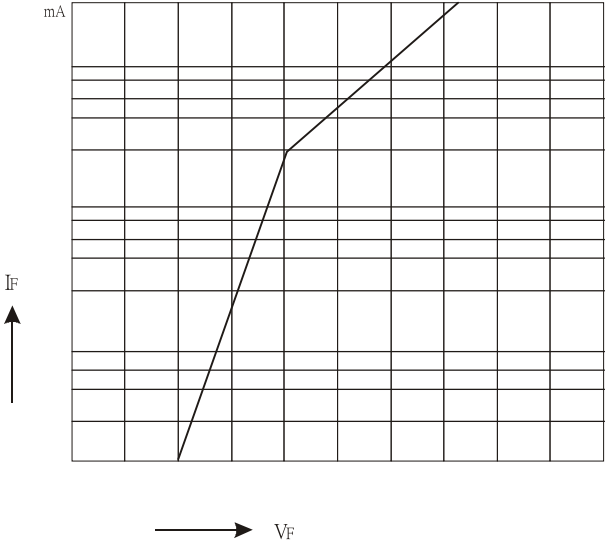


Fig2 Typical forward conduction curve of combination Schottky barrier and PN junction guard ring

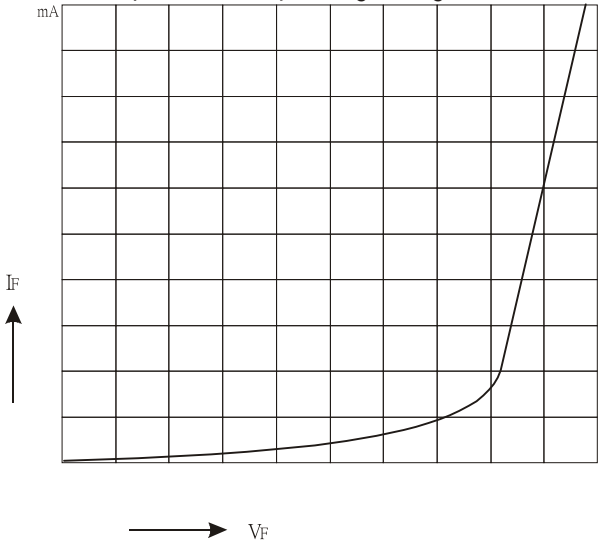


Fig3 Typical variation of reverse current at various temperatures

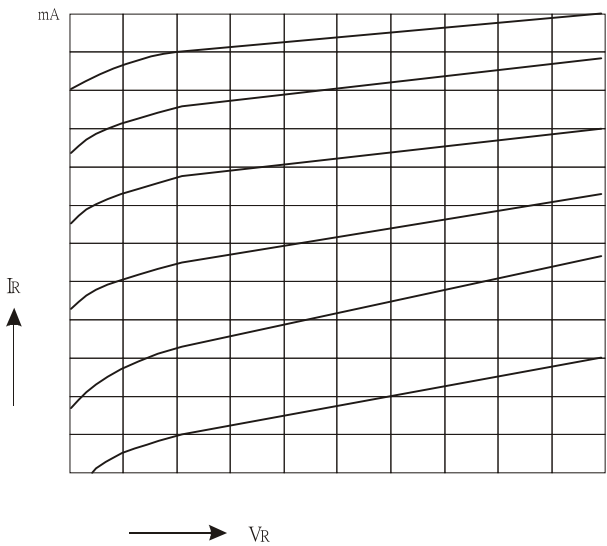


Fig4 Typical capacitance curve as a function of reverse voltage

