

**1N5711****SCHOTTKY BARRIER SWITCHING DIODE**

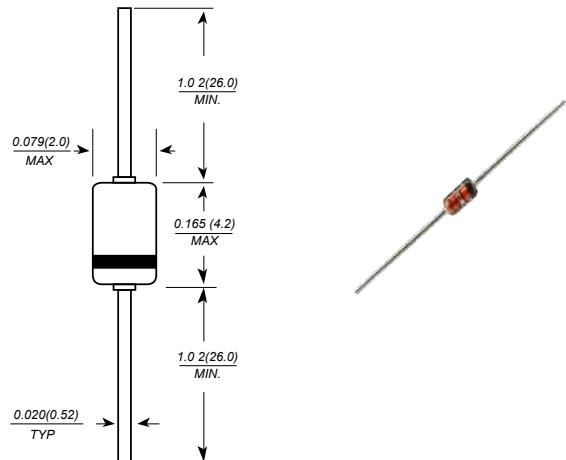
Features

- Ultra-Fast Switching Speed
- High Reverse Breakdown Voltage
- Low Forward Voltage Drop
- Guard Ring Junction Protection

Mechanical Data

- Case: DO-35, Glass
- Leads: Solderable per MIL-STD-202, Method 208
- Marking: Type Number
- Polarity: Cathode Band
- Weight: 0.13 grams (approx.)

DO-35(GLASS)



Dimensions in millimeters

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
Power Dissipation (Infinite Heatsink)	P_D	400 ⁽¹⁾	mW
Maximum Single Cycle Surge 10 μ s Square Wave	I_{FSM}	2	A
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	0.3 ⁽¹⁾	°C/mW
Junction Temperature	T_J	125 ⁽¹⁾	°C
Storage temperature range	T_S	-55 to + 150 ⁽¹⁾	°C

Electrical Characteristics ($T_J = 25^\circ C$ unless otherwise noted)

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

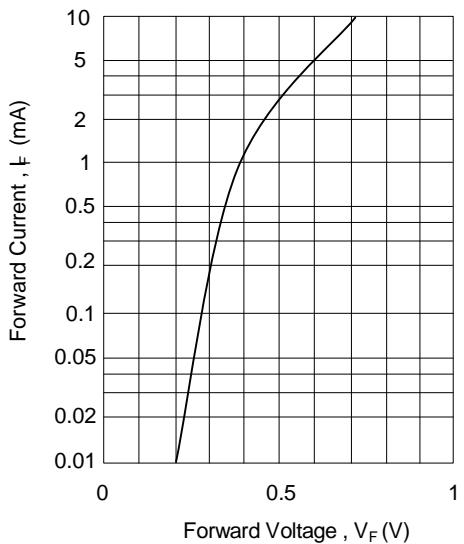
Note:

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

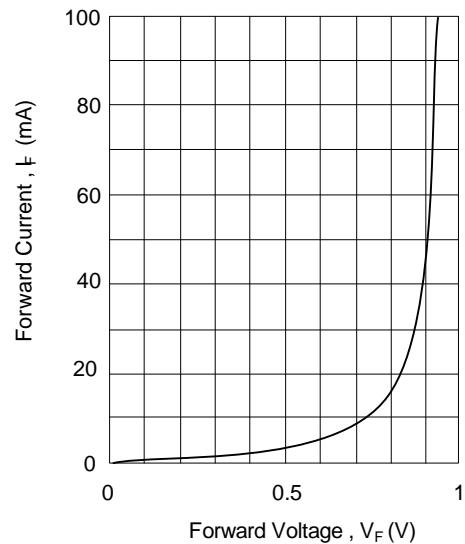


RATING AND CHARACTERISTIC CURVES (1N5711)

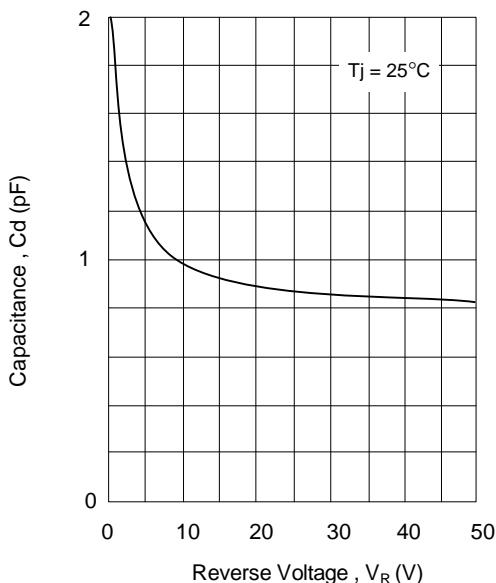
Typical variation of forward current and forward voltage for primary conduction through the schottky barrier



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

