

## Features

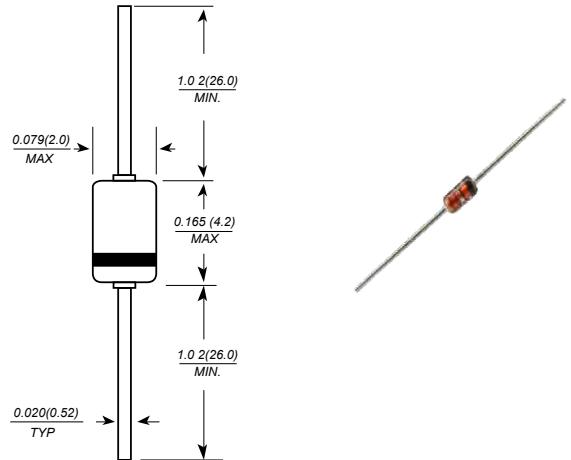
- Ultra-Fast Switching Speed
- High Reverse Breakdown Voltage
- Low Forward Voltage Drop
- Guard Ring Junction Protection

## 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 $T_A = 25^\circ\text{C}$ unless otherwise specified

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

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

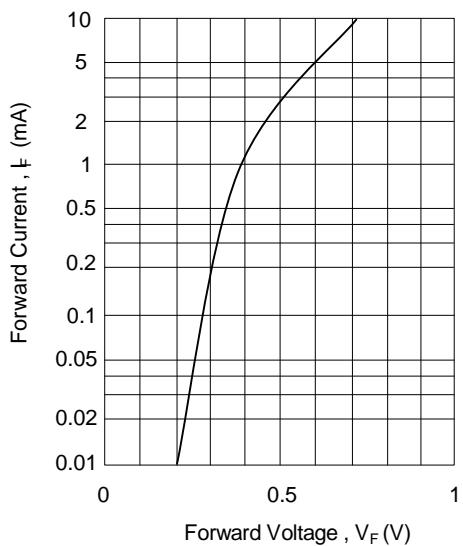
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R = 10 \mu\text{A}$	70	-	-	V
Reverse Current	$I_R$	$V_R = 50 \text{ V}$	-	-	200	nA
Forward Voltage Drop	$V_F$	$I_F = 1\text{mA}$ $I_F = 15\text{mA}$	-	-	0.41 1.0	V
Diode Capacitance	$C_d$	$V_R = 0 \text{ V}, f =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

### Note:

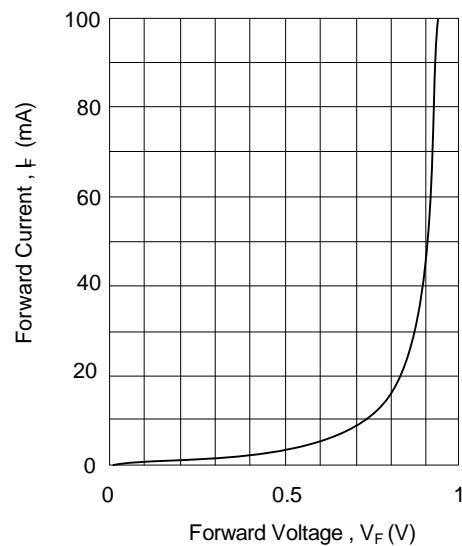
(1) Valid provided that leads at a distance of 4mm from case are kept at ambient temperature..

## RATING AND CHARACTERISTIC CURVES ( 1N5711)

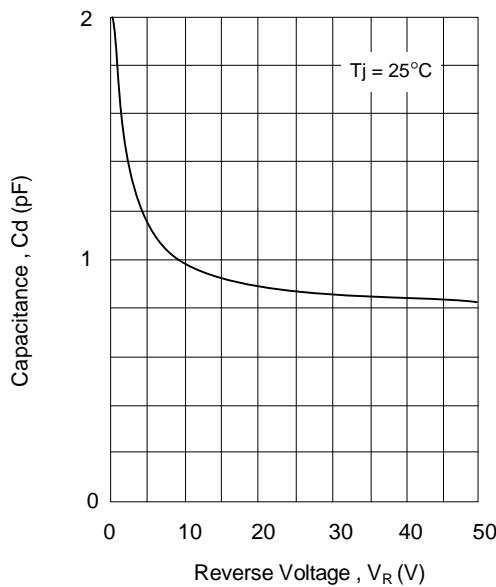
**Typical variation of forward current and forward voltage for primary conduction through the schottky barrier**



**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**

