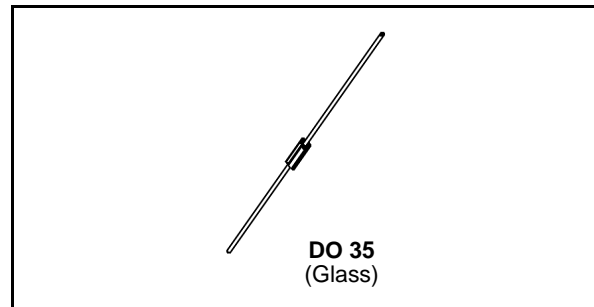


**1N 5711****SMALL SIGNAL SCHOTTKY DIODE****DESCRIPTION**

Metal to silicon junction diode featuring high break-down, low turn-on voltage and ultrafast switching. Primarily intended for high level UHF/VHF detection and pulse application with broad dynamic range. Matched batches are available on request.

**ABSOLUTE RATINGS** (limiting values)

Symbol	Parameter	Value	Unit
$V_{RRM}$	Repetitive Peak Reverse Voltage	70	V
$I_F$	Forward Continuous Current*	$T_a = 25^\circ\text{C}$ 15	mA
$P_{tot}$	Power Dissipation*	$T_a = 25^\circ\text{C}$ 430	mW
$T_{stg}$ $T_j$	Storage and Junction Temperature Range	- 65 to 200 - 65 to 200	$^\circ\text{C}$
$T_L$	Maximum Lead Temperature for Soldering during 10s at 4mm from Case	230	$^\circ\text{C}$

**THERMAL RESISTANCE**

Symbol	Test Conditions	Value	Unit
$R_{th(j-a)}$	Junction-ambient*	400	$^\circ\text{C}/\text{W}$

**ELECTRICAL CHARACTERISTICS**

## STATIC CHARACTERISTICS

Symbol	Test Conditions	Min.	Typ.	Max.	Unit
$V_{BR}$	$T_{amb} = 25^\circ\text{C}$ $I_R = 10\mu\text{A}$	70			V
$V_F^{**}$	$T_{amb} = 25^\circ\text{C}$ $I_F = 1\text{mA}$			0.41	V
	$T_{amb} = 25^\circ\text{C}$ $I_F = 15\text{mA}$			1	
$I_R^{**}$	$T_{amb} = 25^\circ\text{C}$ $V_R = 50\text{V}$			0.2	$\mu\text{A}$

## DYNAMIC CHARACTERISTICS

Symbol	Test Conditions	Min.	Typ.	Max.	Unit
C	$T_{amb} = 25^\circ\text{C}$ $V_R = 0\text{V}$ $f = 1\text{MHz}$			2	pF
$\tau$	$T_{amb} = 25^\circ\text{C}$ $I_F = 5\text{mA}$ Krakauer Method			100	ps

\* On infinite heatsink with 4mm lead length

\*\* Pulse test:  $t_p \leq 300\mu\text{s}$   $\delta < 2\%$ .

Matched batches available on request. Test conditions (forward voltage and/or capacitance) according to customer specification.

Figure 1. Forward current versus forward voltage at low level (typical values).

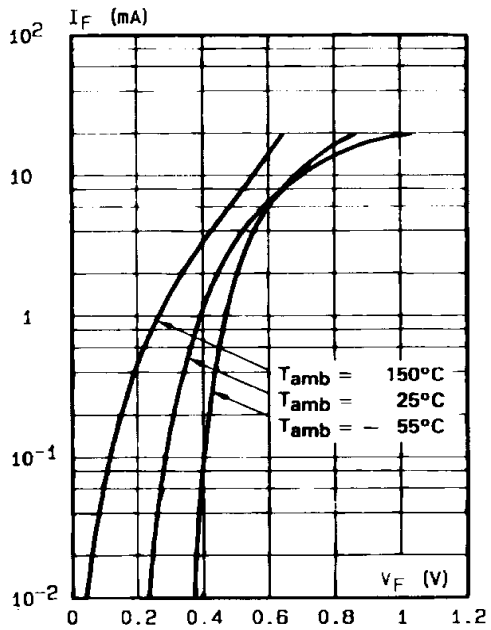


Figure 2. Capacitance C versus reverse applied voltage  $V_R$  (typical values).

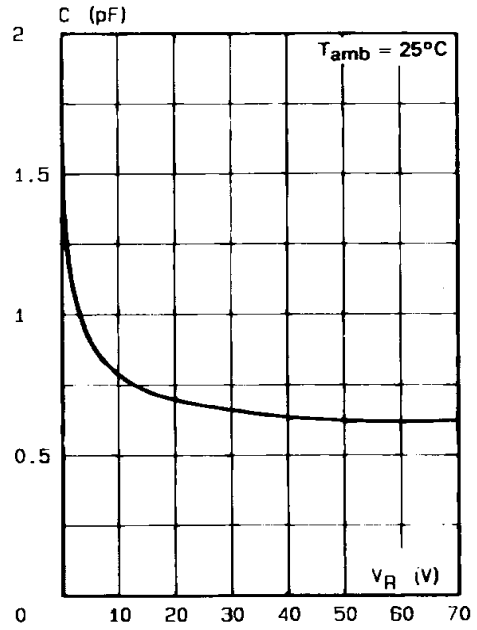


Figure 3. Reverse current versus ambient temperature.

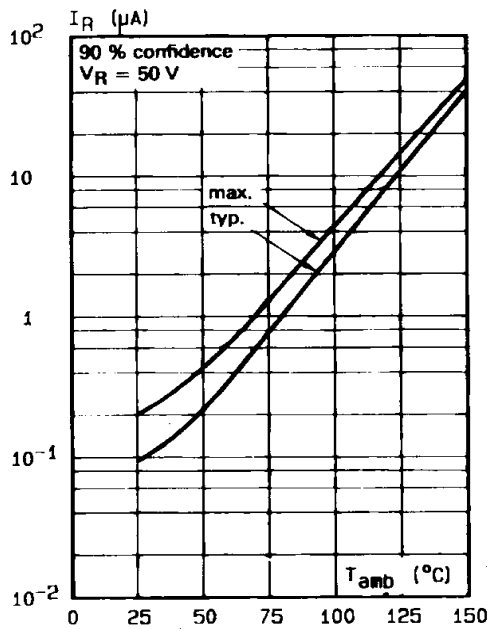
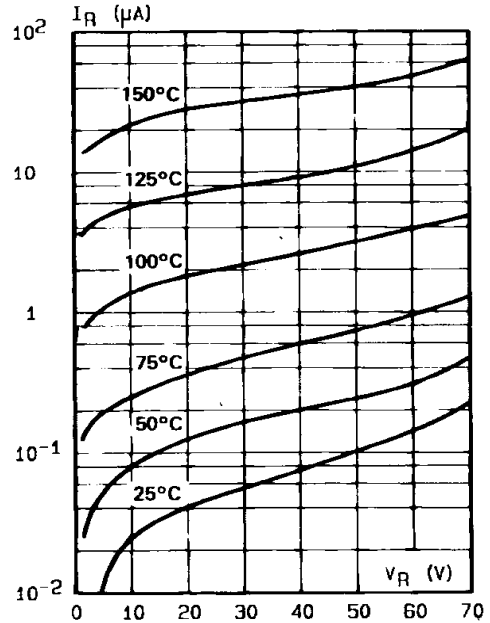
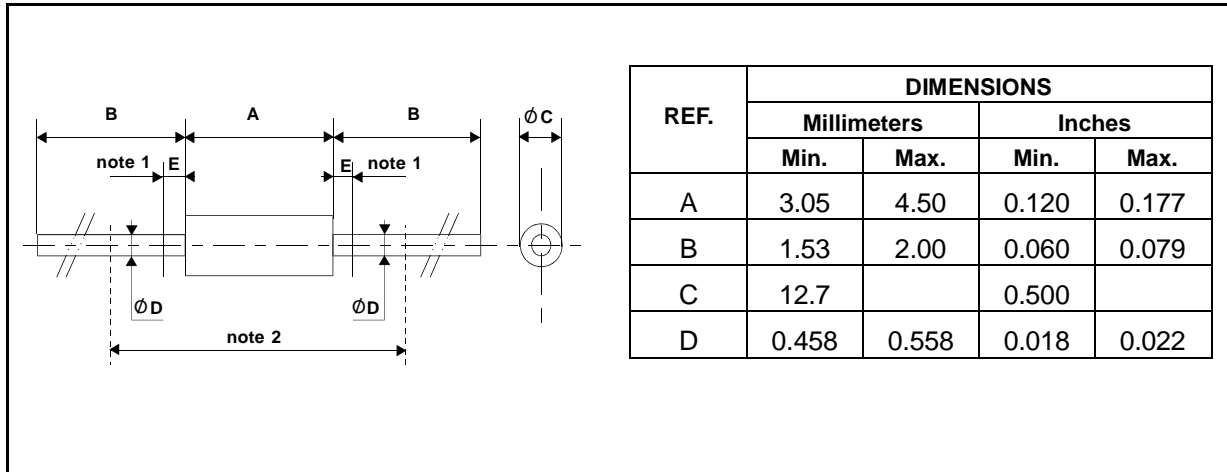


Figure 4. Reverse current versus continuous reverse voltage (typical values).



## PACKAGE MECHANICAL DATA

DO 35 Glass



Cooling method : by convection and conduction  
 Marking: clear, ring at cathode end.  
 Weight: 0.15g

Information furnished is believed to be accurate and reliable. However, STMicroelectronics assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of STMicroelectronics. Specifications mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information previously supplied. STMicroelectronics products are not authorized for use as critical components in life support devices or systems without express written approval of STMicroelectronics.

The ST logo is a registered trademark of STMicroelectronics  
 © 1999 STMicroelectronics - Printed in Italy - All rights reserved.

STMicroelectronics GROUP OF COMPANIES  
 Australia - Brazil - China - Finland - France - Germany - Hong Kong - India - Italy - Japan - Malaysia  
 Malta - Morocco - Singapore - Spain - Sweden - Switzerland - United Kingdom - U.S.A.

<http://www.st.com>