

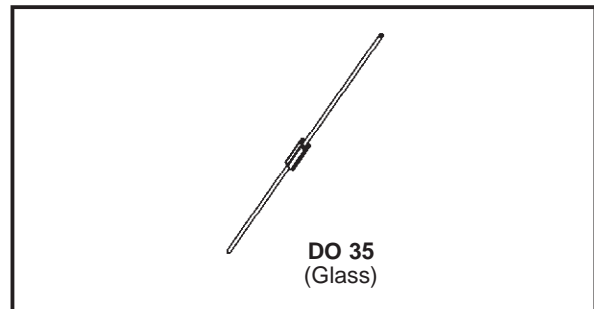


1N 5711

## 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	$^\circ\text{C/W}$

### 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).

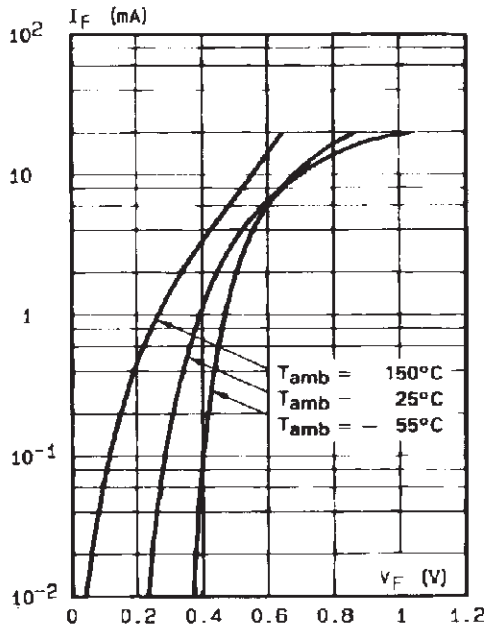


Figure 2. Capacitance C versus reverse applied voltage  $V_R$  (typical values).

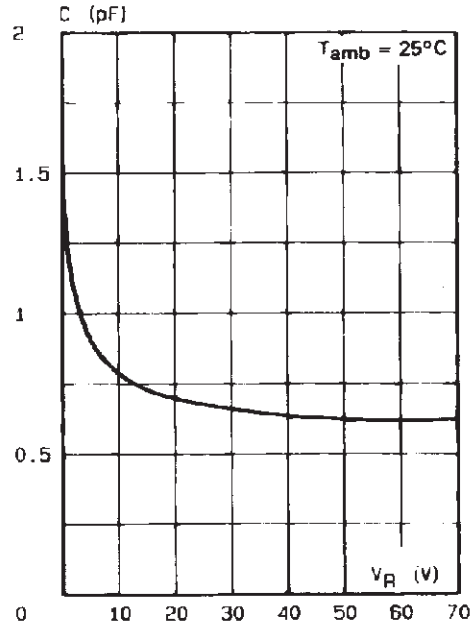


Figure 3. Reverse current versus ambient temperature.

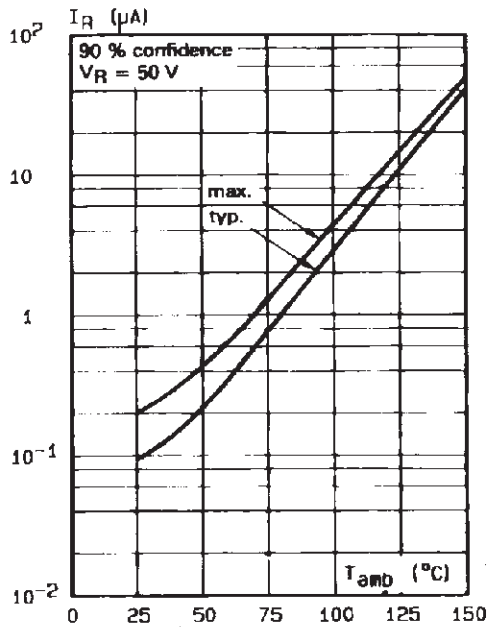
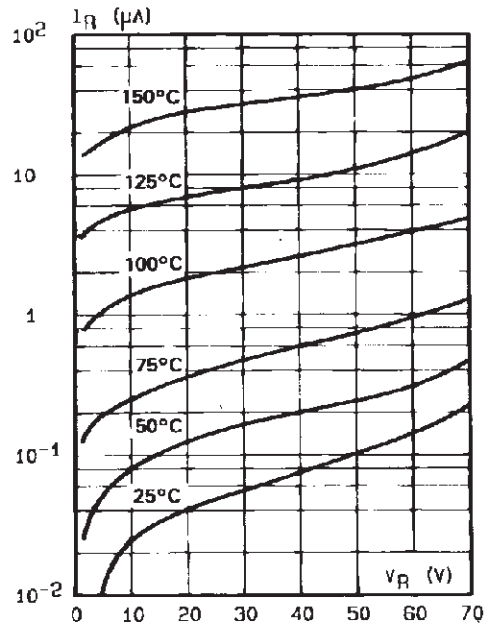
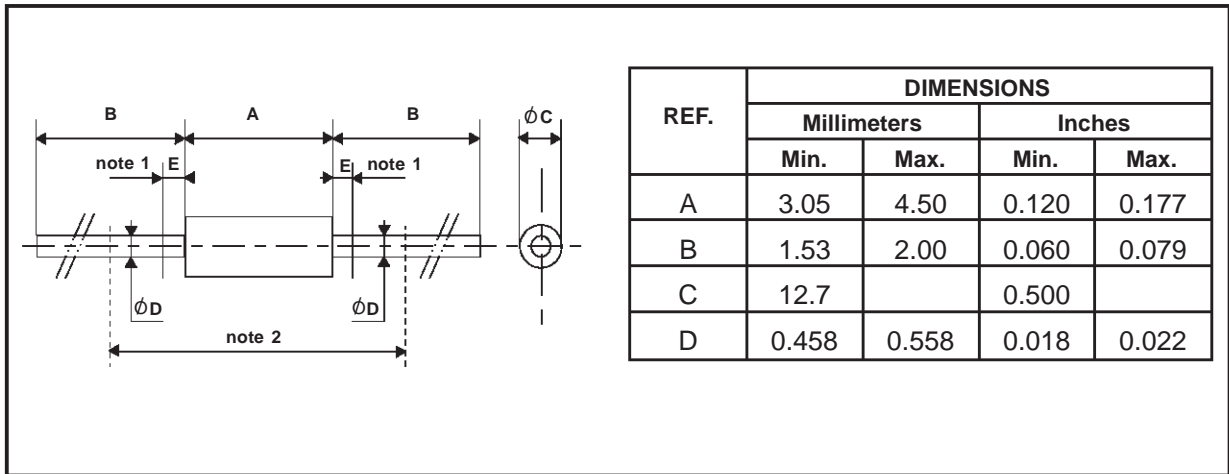


Figure 4. Reverse current versus continuous reverse voltage (typical values).



## PACKAGE MECHANICAL DATA

DO 35 Glass



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

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