

LAMPIRAN 1

Datasheet dioda schottky 1N5711

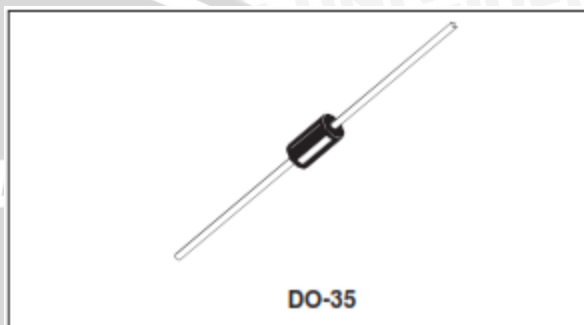


1N5711

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 <sub>RRM</sub>	Repetitive Peak Reverse Voltage	70	V
I <sub>F</sub>	Forward Continuous Current*	T <sub>a</sub> = 25°C 15	mA
P <sub>tot</sub>	Power Dissipation*	T <sub>a</sub> = 25 C 430	mW
T <sub>stg</sub> T <sub>j</sub>	Storage and Junction Temperature Range	- 65 to 200 - 65 to 200	°C
T <sub>L</sub>	Maximum Lead Temperature for Soldering during 10s at 4mm from Case	230	C

THERMAL RESISTANCE

Symbol	Test Conditions	Value	Unit
R <sub>th(j-a)</sub>	Junction-ambient*	400	°C/W

ELECTRICAL CHARACTERISTICS

STATIC CHARACTERISTICS

Symbol	Test Conditions	Min.	Typ.	Max.	Unit
V <sub>BR</sub>	T <sub>amb</sub> = 25°C I <sub>R</sub> = 10 A	70			V
V <sub>F</sub> **	T <sub>amb</sub> = 25 C I <sub>F</sub> = 1mA			0.41	V
	T <sub>amb</sub> = 25 C I <sub>F</sub> = 15mA			1	
I <sub>R</sub> **	T <sub>amb</sub> = 25 C V <sub>R</sub> = 50V			0.2	A

DYNAMIC CHARACTERISTICS

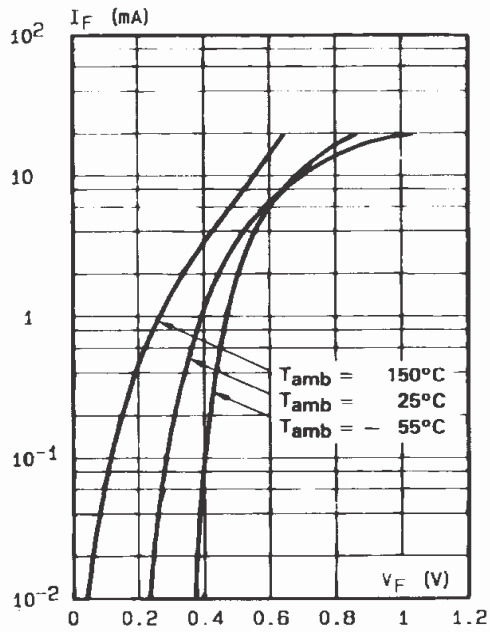
Symbol	Test Conditions	Min.	Typ.	Max.	Unit
C	T <sub>amb</sub> = 25°C V <sub>R</sub> = 0V f = 1MHz			2	pF
	T <sub>amb</sub> = 25 C I <sub>F</sub> = 5mA Krakauer Method			100	ps

\* On infinite heatsink with 4mm lead length  
 \*\* Pulse test: t<sub>p</sub> 300 s 2%.  
 Matched batches available on request. Test conditions (forward voltage and/or capacitance) according to customer specification.

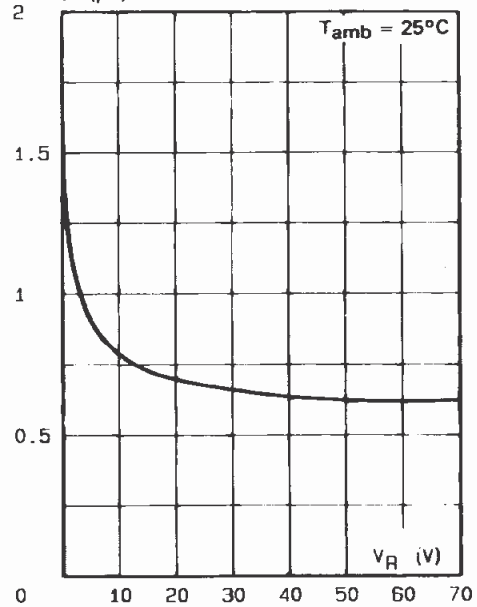




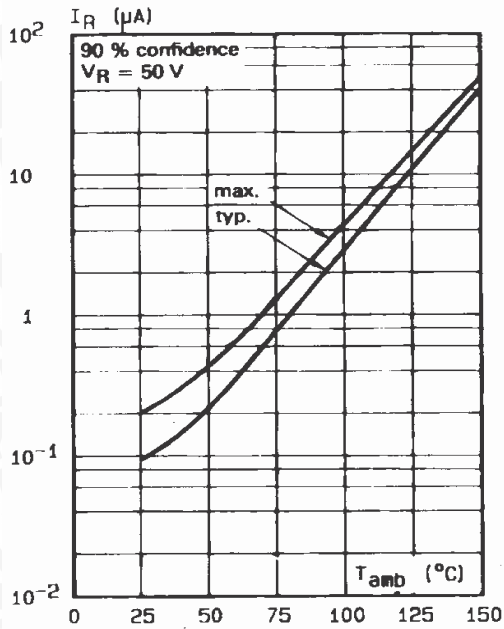
**Fig. 1:** Forward current versus forward voltage at low level (typical values).



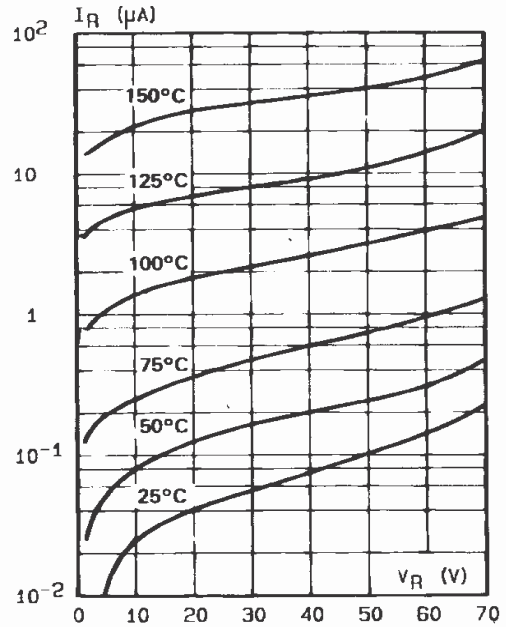
**Fig. 2:** Capacitance  $C_C$  versus reverse applied voltage  $V_R$  (typical values).



**Fig. 3:** Reverse current versus ambient temperature.

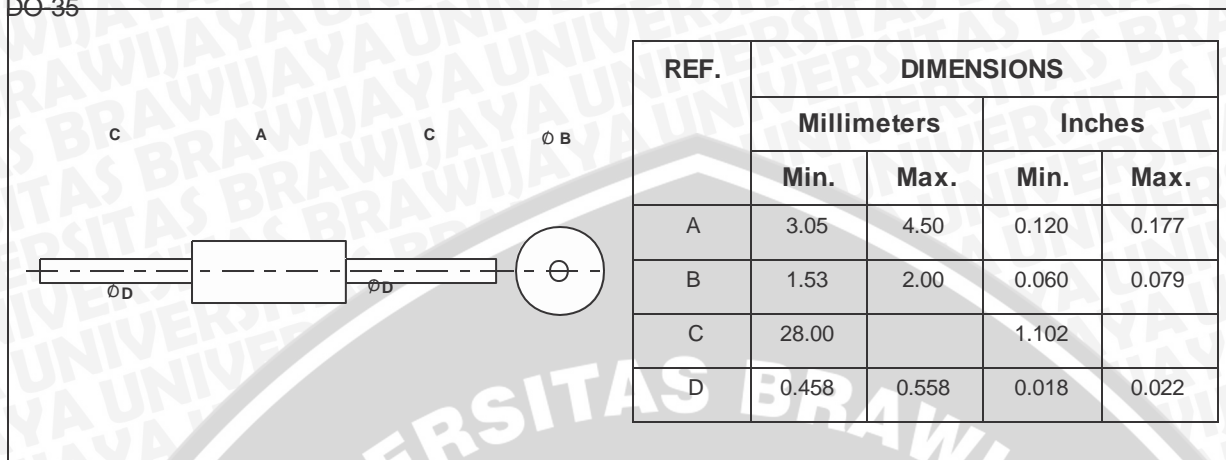


**Fig. 4:** Reverse current versus continuous reverse voltage (typical values).



**PACKAGE MECHANICAL DATA**

DO-35



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

