New Jersey Semi-Conductor Products, Inc.

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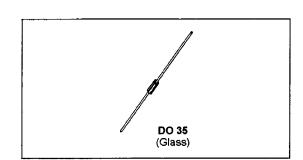
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BAR 19

SMALL SIGNAL SCHOTTKY DIODE



DESCRIPTION

Metal to silicon junction diode primarly intended for UHF mixers and ultrafast switching applications.

ABSOLUTE RATINGS (limiting values)

Symbol	Parameter	Value	Unit	
VRRM	Repetitive Peak Reverse Voltage		4	V
l _F	Forward Continuous Current*	30	mA	
I _{FSM}	Surge non Repetitive Forward Current*	t _p ≤ 1s	60	mA
T _{stg} T _i	Storage and Junction Temperature Range	- 65 to +150 - 65 to +125	°C	
Tı	Maximum Lead Temperature for Soldering of from Case	230	°C	

THERMAL RESISTANCE

Symbol	Test Conditions	Value	Unit
R _{th(j-a)}	Junction-ambient*	400	°C/W

ELECTRICAL CHARACTERISTICS

STATIC CHARACTERISTICS

Symbol		Test Conditions	Min.	Тур.	Max.	Unit
V_{BR}	T _{amb} = 25°C	I _R = 10μΑ	4			V
V _F (1)	T _{amb} = 25°C	I _F = 10mA			0.6	V
l _R (1)	T _{amb} = 25°C	V _R = 5V			0.25	μΑ

DYNAMIC CHARACTERISTICS

Symbol	Test Conditions				Тур.	Max.	Unit
С	T _{amb} = 25°C	V _R = 1 V	f = 1MHz			1	pF
F (2)	T _{amb} = 25°C	f = 1GHz			6		dB

^{*} On infinite heatsink with 4mm lead length

(1) Pulse test: t_p≤300μs δ<2%.
(2) Noise figure test:

- diode is inserted in a tuned stripline circuit

local oscillator frequency 1GHz
 local oscillator power 1mW

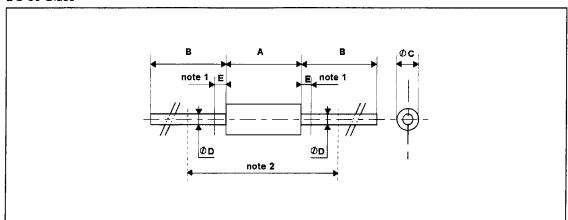
- intermediate frequency amplifier, tuned on 30MHz, has a noise figure 1.5dB

NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Quality Semi-Conductors

PACKAGE MECHANICAL DATA

DO 35 Glass



DIMENSIO		SIONS		100 100 100 100 100 100 100 100 100 100				
REF.	Millimeters		Inches		NOTES			
	Min.	Max.	Min.	Max.				
Α	3.050	4.500	0.120	0.117				
В	12.7		0.500		1 - The lead diameter \varnothing D is not controlled over zone E			
ØC	1.530	2.000	0.060	0.079	2 - The minimum axial lengh within which the device may be placed			
ØD	0.458	0.558	0.018	0.022	with its leads bent at right angles is 0.59"(15 mm)			
Е		1.27		0.050				