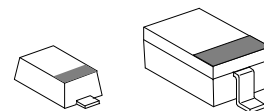


# VARACTOR DIODE

## ■GENERAL DESCRIPTION

NJX1560/1561 is a GaAs varactor diode with very low total capacitance. It is suited for VCO or detector up to SHF band. It features low total capacitance and high capacitance ratio. It is adopted a very small surface-mount plastic package.



NJX1560

NJX1561

## ■FEATURE

- High Total Capacitance Ratio 3.3 (NJX1560) / 3.2(NJX1561)
- Very Small SMD Package (VSDP / SDP)

## ■ABSOLUTE MAXIMUM RATINGS

 (T<sub>a</sub>=25°C)

PARAMETER	SYMBOL	RATINGS	UNITS
Reverse Voltage	V <sub>R</sub>	25	V
Forward Current	I <sub>F</sub>	10	mA
Operating Temperature	T <sub>OP</sub>	-40~+85	°C
Storage Temperature	T <sub>STG</sub>	-55~+125	°C

## ■ELECTRICAL CHARACTERISTIC

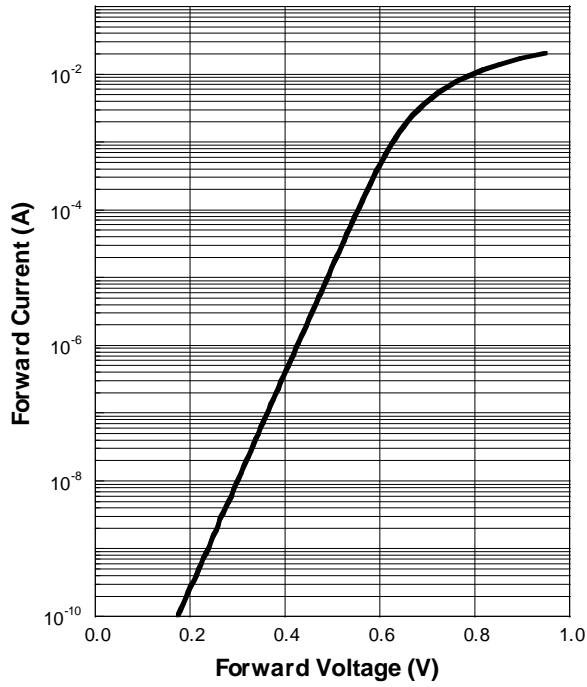
 (T<sub>a</sub>=25°C)

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =10mA	-	0.8	0.95	V
Reverse Voltage	V <sub>R</sub>	I <sub>R</sub> =10uA	25	-	-	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =20V	-	-	1.0	uA
Total Capacitance 1	C <sub>t1</sub>	V <sub>R</sub> =0V, f=1MHz				pF
NJX1560			0.59	0.66	-	
NJX1561			0.61	0.70	-	
Total Capacitance 2	C <sub>t2</sub>	V <sub>R</sub> =10V, f=1MHz				pF
NJX1560			-	0.20	0.30	
NJX1561			-	0.22	0.32	
Total Capacitance Ratio	C <sub>t1</sub> / C <sub>t2</sub>	C <sub>t1</sub> / C <sub>t2</sub>				-
NJX1560			-	3.3	-	
NJX1561			-	3.2	-	

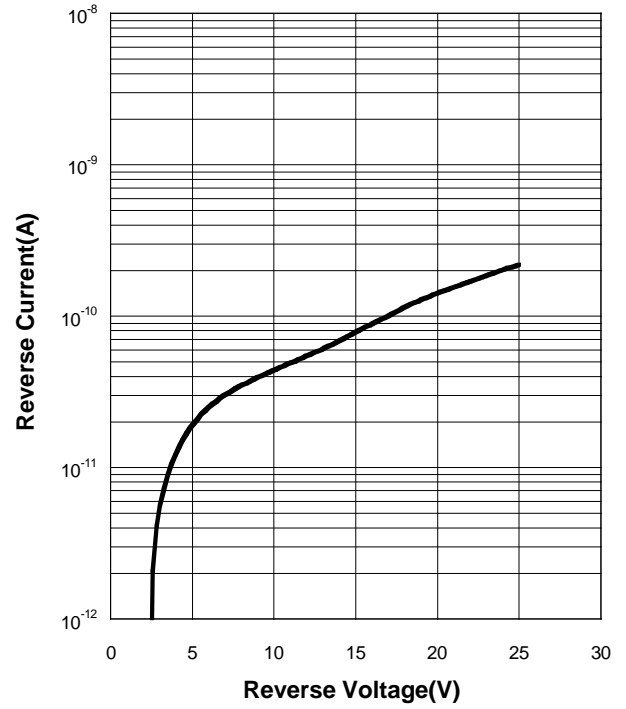
# NJX1560/61

## TYPICAL CHARACTERISTICS

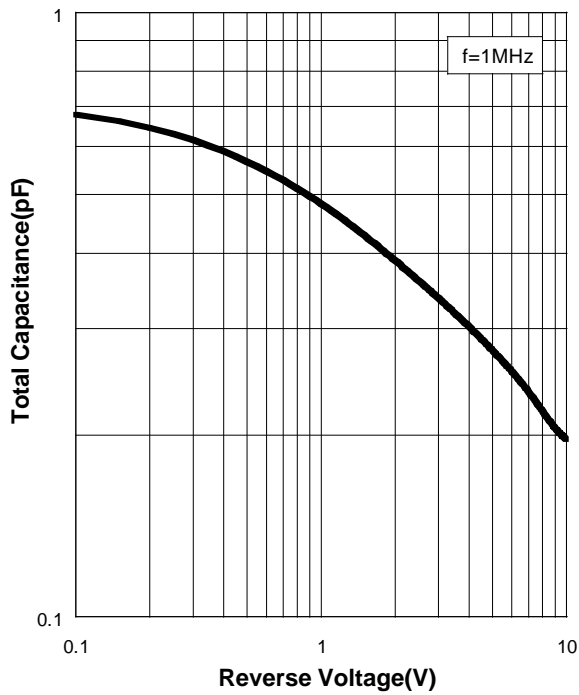
Forward Current vs Forward Voltage



Reverse Current vs. Reverse Voltage

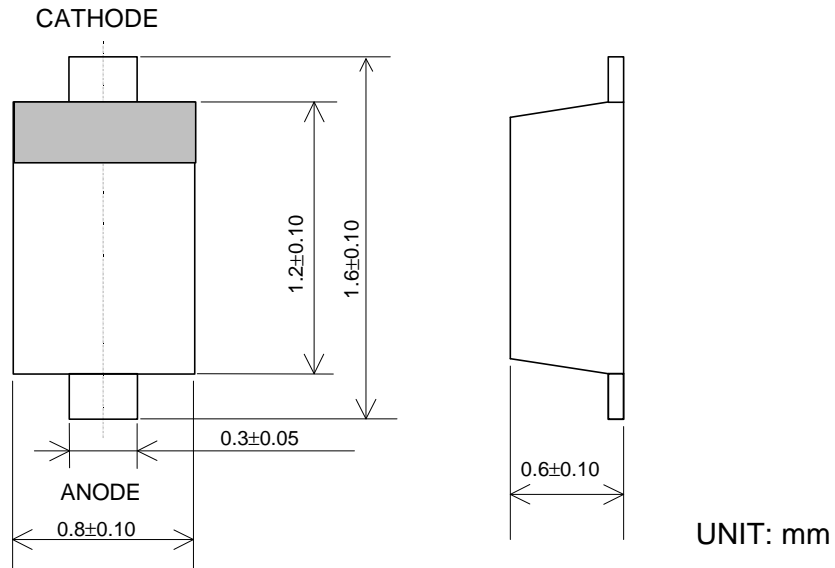


Total Capacitance vs. Reverse Voltage

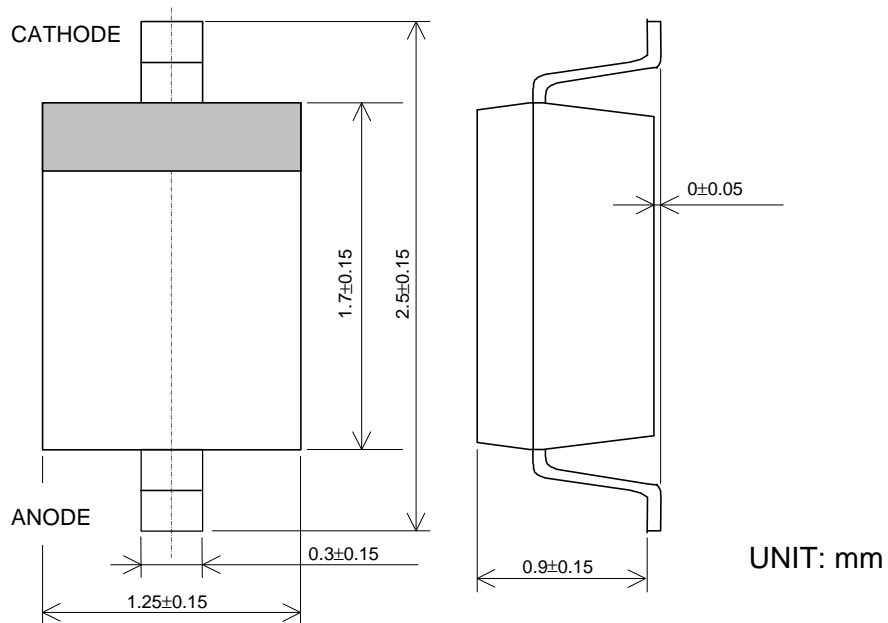


## PACKAGE OUTLINE

### 1) NJX1560 (VSDP)



### 2) NJX1561 (SDP)



#### Cautions on using this product

This product contains Gallium-Arsenide (GaAs) which is a harmful material.

- Do NOT eat or put into mouth.
- Do NOT dispose in fire or break up this product.
- Do NOT chemically make gas or powder with this product.
- To waste this product, please obey the relating law of your country.

#### [CAUTION]

The specifications on this databook are only given for information, without any guarantee as regards either mistakes or omissions. The application circuits in this databook are described only to show representative usages of the product and not intended for the guarantee or permission of any right including the industrial rights.

This product may be damaged with electric static discharge (ESD) or spike voltage. Please handle with care to avoid these damages.