



MEDIUM POWER GUNN DIODES

T:07-11

NJX4002/4403/4404

1 ■ Description

NJX4402, 4403, 4404 are medium power Gunn diodes designed for in X-band cw oscillators. These Gunn diodes utilizing the bulk negative resistance effect can be easily obtained microwave power from DC power.

The PHS (Plated Heat Sink) structure are adopted in these devices.

These devices are suited for use in low noise sources such as medium power transmitter applications and motion detector applications.

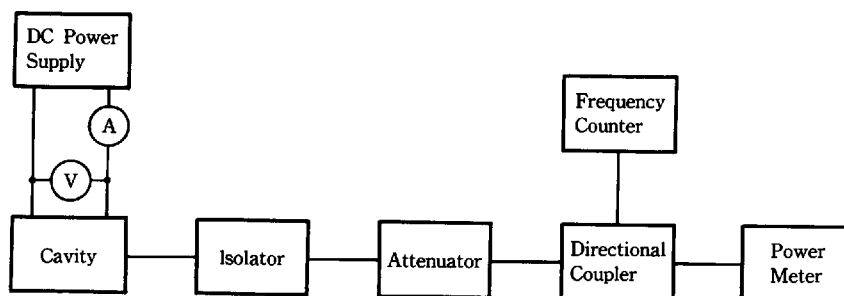
■ Absolute Maximum Rating

Parameter	DC Forward Voltage	Storage Temperature Range	Operating Temperature Range	Case Temperature
Ratings	($V_{OP}+1$) V	-65~+150°C	-20~+90°C	100°C

■ Electrical Characteristics (Ta=25°C)

Parameter	Frequency f(GHz)	Output Power Po(mW)		Operating Voltage Vop(V)		Operating Current Iop(mA)	Package Outline
		Min.	Max.	Min.	Max.		
Test Condition	Vop=9V	Vop=9V				Vop=9V	
Type	Typ.					Max.	
NJX4402	10.5	40	60	9	11	500	A
NJX4403	10.5	60	90	9	11	600	A
NJX4404	10.5	90	110	9	11	650	A

■ Test Circuit

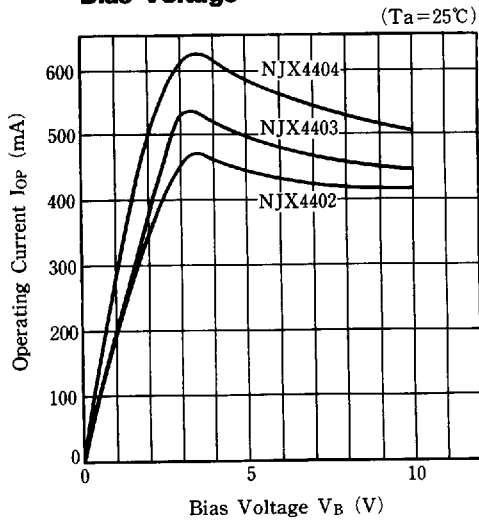


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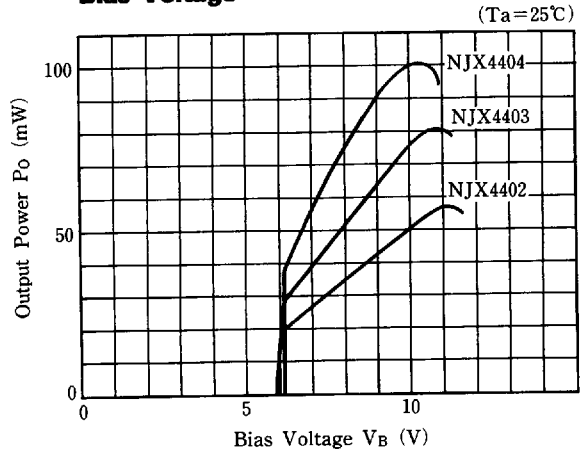
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■ **Typical Performance Characteristics**

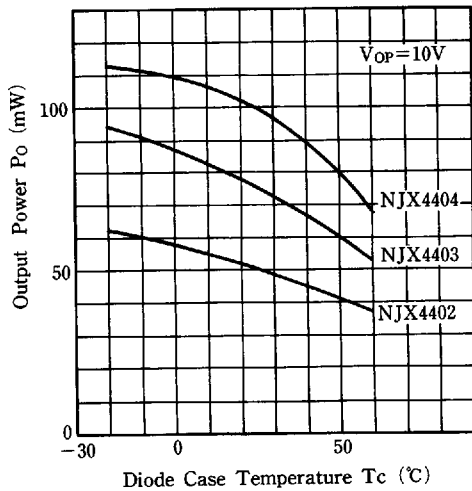
NJX4402, 4403, 4404
Operating Current vs. Bias Voltage



NJX4402, 4403, 4404
Output Power vs. Bias Voltage



NJX4402, 4403, 4404
Output Power vs. Diode Case Temperature





PACKAGE OUTLINE

T-91-20

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