

NWSPA1013-40

Ku-band Solid State Power Amplifier

SPACE Products



NANOWAVE
Technologies Inc.

Revision 2.2

GENERAL DESCRIPTION

NWSPA1013-40 is a Ku-band SSPA with operating frequency range 10.0 – 13.0GHz and high gain of 60dB. Pout is +40dBm CW and modulated carrier, with proven LEO heritage.

NANOWAVE has mass-production capabilities and a track record of more than 7,900 LNAs in LEO.



FEATURES

- Broadband performance: 10.0 – 13.0GHz
- 60dB Small Signal Gain
- +38dBm P1dB

APPLICATIONS

- SATCOM for LEO / MEO / GEO
- Aerospace

ELECTRICAL PARAMETERS @ +25°C

Parameter	Unit	Min	Typ	Max	Remarks
Frequency Range	GHz	10.0		13.0	customizable
Small Signal Gain	dB		60.0		
Gain Flatness	dB		±0.5		
P1dB	dBm		+38.0		
Input Return Loss	dB		-15		
Output Return Loss	dB		-12		
DC Power Consumption	W		33.8 ¹⁾	37.0 ²⁾	¹⁾ @ 25 °C / ²⁾ @65 °C

MECHANICAL and ENVIRONMENTAL PARAMETERS

Parameter	Unit	Min	Typ	Max	Remarks
Operating Temperature	°C	-25		+65	
Storage Temperature	°C	-55		+125	
RF Interface			SMA		
Size (L, W, H)	mm		78(L) x 31(W) x 11(H)		
Weight	gram		54		

Notes: Customized shapes and outlines of packaging, to enable customer Form-Fit Functionality requirements.

Additional features:

- Hermetically sealed package
- All plating and painting is RoHS compliant

For further information please contact NANOWAVE Technologies Inc. at sales@nanowavetech.com , or call at (+1) 416-252-5602.