100MHz to 10GHz high power RF noise module

Description

HPNS010 is a high power Gaussian white noise source which operates over a frequency range from 0.1GHz to 10GHz and provides high noise power of ENR up to 60dB. Spectrum Magnetics LLC provides ENR calibration in 1GHz increments with low VSWR. The module of this source can operates under +5VDC with optional +28V BNC female connector.

Feature

0.1GHz~10GHz frequency range
Output ENR >50dB at 1GHz
Flatness:<3dB at whole range
3.5mm male connector
Modulation
DC voltage

Application

Signal to noise ratio (SNR)measurement
Noise figure measurements
EM environment simulation
Measurement equipment
Bit error rate (BNR) test
Jamming

Description	Min	typ	Max	Option*	Unit
Frequency range at -3dB	0.1		10		GHz
Output ENR at 1GHz	48	50	52	>60	dB
Adjusted ENR rang				40	dB
Ripple in 1GHz interval			0.3		dB
Flatness of ENR			3		dB
Short time output stability for 15mi		0.5		<0.1	dB
Long time output stability for 8hour		1.5		0.2	dB
Impedance		50			ohm
Rise/Fall time for square modulation				5	ns
Calibration frequency interval				1	GHz
RF Connector		3.5mm/SMA			
VSWR			1.9:1	<1.2:1	
Input Voltage (DC)		5		BNC 28	V
Operating temperature	0		60		C
Power consumption		10			W
Dimension		104 ×73×18			mm^3
*option will influence other parameter					

Order information

Order code				0				1			2			3		4		5		6		7
H	P	N	S	0	1	0	-			-	1	9	-	1	-	1	-	3	-	1	-	2

0	high frequency at 3dB		>10GHz
	Code		010

			Standard						Optional
1	ENR (dB)		50		40		30		other*
	code		50		40		30		00

2	VEWR		1.9:1	Customized**
	code		19	00

3	connector		3.5mm/SMA male	
	Code		1	

4	Adjustable ENR		Fixed	Variable
	Code		1	2

5	Power supply		5V	DC 28V
	code		3	4

6	Modulation		No	Yes***
	code		1	2

7	Package		Benchtop	Customized
	Code		3	0

* from 20 dB to 60dB

** low to 1.2:1, ENR can't be guaranteed 50 dB

*** ENR is peak value. Customer has to define the modulating frequency

Dimension (unit: mm)