

GSHM noise generators

GSHM noise generators are used as a measure of noise power spectral density differential between 0.01 GHz and 20 GHz, when operating H5M noise figure analyzers and SK4M spectrum analyzers with IKSH option.

Noise voltage source of GSHM is a bare avalanche transit-time diode (ATT diode) installed to hybrid integrated circuit module, which is, in turn, connected to precision microwave adapter with an attenuating adapter. ATT diode is powered through the built-in current stabilizer providing stability of noise power spectral density irrespective of noise generator supply voltage stability.



**INCLUDED IN STATE REGISTER
OF MEASURING INSTRUMENTS**

Versions

Model	Output connector type	ERNT range	Output VSWR, max.	Frequency range
GSHM2-18A-01	type III (male)	4 ... 7 dB	1.25	0.01 ... 18 GHz
GSHM2-18A-11	type N (male)			
GSHM2-18B-01	type III (male)	13 ... 16 dB	1.45	
GSHM2-18B-11	type N (male)			
GSHM2-20A-03	type IX, version 3 (male)	4 ... 7 dB	1.25	0.01 ... 20 GHz
GSHM2-20A-13	3.5 mm (male)			
GSHM2-20B-03	type IX, version 3 (male)	13 ... 16 dB	1.45	
GSHM2-20B-13	3.5 mm (male)			

Specifications

Maximum allowable absolute error of determined actual ERNT	± 0.4 dB
Rated output impedance	50 Ohm
Supply voltage	(28 \pm 0.28) V
Current consumption, max	35 mA
Power connector type	BNC (female)
Operating temperature range	+15 ... +35 °C
Dimensions, max	140 × 30 × 25 mm

Ordering information

1) Noise generator GSHM2-18A/18B/20A/20B. 2) Operational documentation.

Noise generators	
GSHM2-18A-01	Noise generator, 0.01 ... 18 GHz, ENR 6 dB, type III (male)
GSHM2-18A-11	Noise generator, 0.01 ... 18 GHz, ENR 6 dB, type N (male)
GSHM2-18B-01	Noise generator, 0.01 ... 18 GHz, ENR 15 dB, type III (male)
GSHM2-18B-11	Noise generator, 0.01 ... 18 GHz, ENR 15 dB, type N (male)
GSHM2-20A-03	Noise generator, 0.01 ... 20 GHz, ENR 6 dB, type IX, ver. 3 (male)
GSHM2-20A-13	Noise generator, 0.01 ... 20 GHz, ENR 6 dB, 3.5 mm (male)
GSHM2-20B-03	Noise generator, 0.01 ... 20 GHz, ENR 15 dB, type IX, ver. 3 (male)
GSHM2-20B-13	Noise generator, 0.01 ... 20 GHz, ENR 15 dB, 3.5 mm (male)

Ordering example

- Noise generator GSHM2-20B-13 – 1 pcs.