

CLPA-6G12G-1145-S is a GaAs HBT Ultra Low Noise Amplifier in a miniature, hermetic module designed to operate between 6 and 12 GHz. This high dynamic range amplifier module provides 11 dB of gain, 4.5 dB noise figure and up to 23 dB of output power with a single supply of +7V.

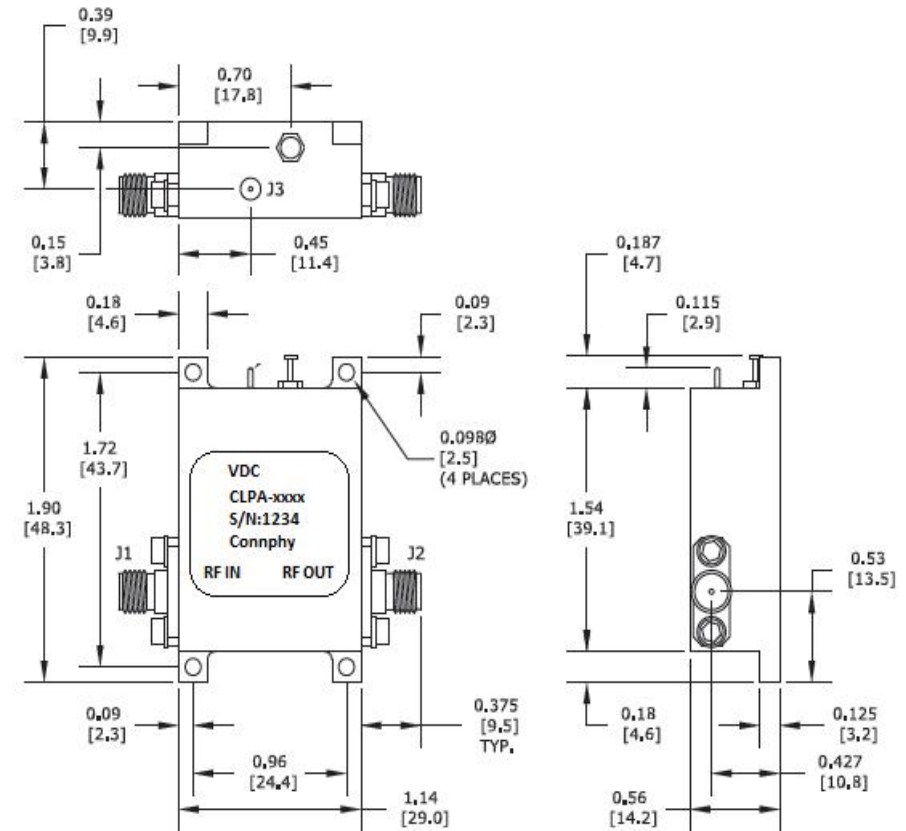
Features:

- Ultra Low Phase Noise: -167 dBc/Hz @ 1 kHz
- Gain: 11 dB
- Noise Figure: 4.5 dB

Specifications:


Frequency Range:	6.0-12.0 GHz
Gain:	11 dB Typ, 9 dB Min
Gain Flatness:	+/-1.0 dB Typ
Noise Figure:	4.5 dB Typ
P1dB:	17 dBm Typ
VSWR:	1.45 Typ
Psat:	22 dBm Typ
IP3:	34 dBm Typ
Phase Noise @ 100 Hz, Psat, 10 GHz:	-157 dBc Typ
Phase Noise @ 1 kHz, Psat, 10 GHz:	-167 dBc Typ
Phase Noise @ 10 kHz, Psat, 10 GHz:	-176 dBc Typ
Phase Noise @ 100 kHz, Psat, 10 GHz:	-180 dBc Typ
Single Supply Voltage:	+7V @ 170mA
RF Connectors:	SMA Female

Mechanical Outline(Inches/mm) :

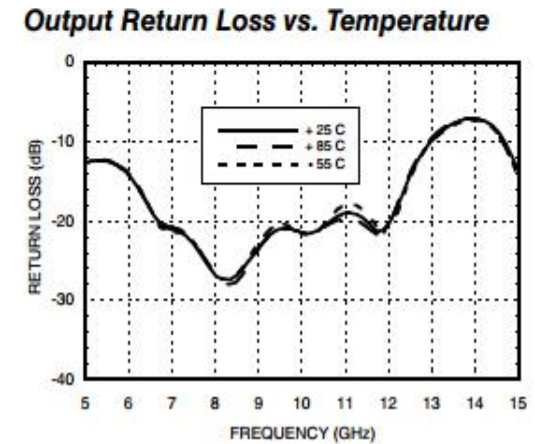
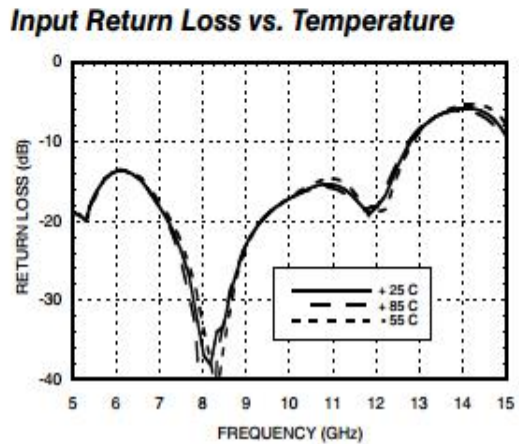
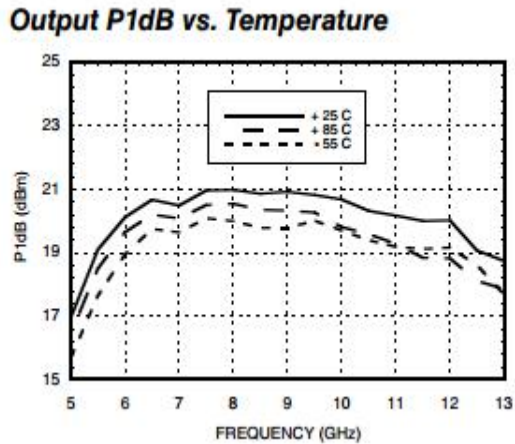
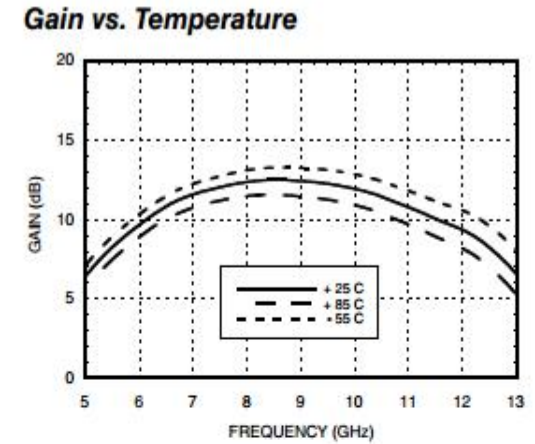
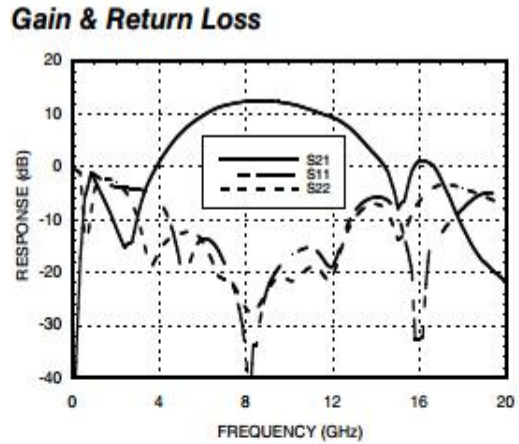
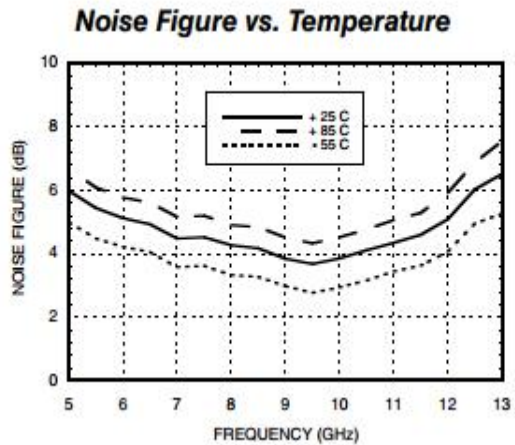


Environmental Ratings:

Temperature:	-25°C to +71 °C Operating
	-65 °C to +100 °C Non-Operating
Vibration:	MIL-STD-202F, Method 204D Cond. B
Altitude:	MIL-STD-202F, Method 105C Cond. B
Temperature Cycle:	MIL-STD-202F, Method 107D Cond. A

LOW PHASE NOISE AMPLIFIER			
CLPA-6G12G-1145-S			
DRAWN:	DWG NO.:	REV CODE: Rev.1.0	 www.connphy.com sales@connphy.com
CHECKRD:	DATE: 08/07/15	SHEET : 1 OF 1	
ISSUED:	SIZE: A	SCALE : N / A	
			Notes: SPEC ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Typical Performance Data:



Environmental Ratings:

Temperature: -25°C to +71 °C Operating
 -65 °C to +100 °C Non-Operating

Vibration: MIL-STD-202F, Method 204D Cond. B

Altitude: MIL-STD-202F, Method 105C Cond. B

Temperature Cycle: MIL-STD-202F, Method 107D Cond. A

LOW PHASE NOISE AMPLIFIER CLPA-6G12G-1145-S

DRAWN:	DWG NO.:	REV CODE: Rev.1.0
CHECKRD:	DATE: 08/07/15	SHEET : 1 OF 1
ISSUED:	SIZE: A	SCALE : N / A

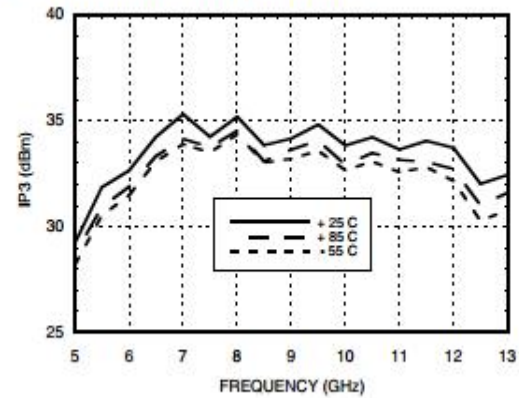
CONNPHY
Microwave Inc.

www.connphy.com
sales@connphy.com

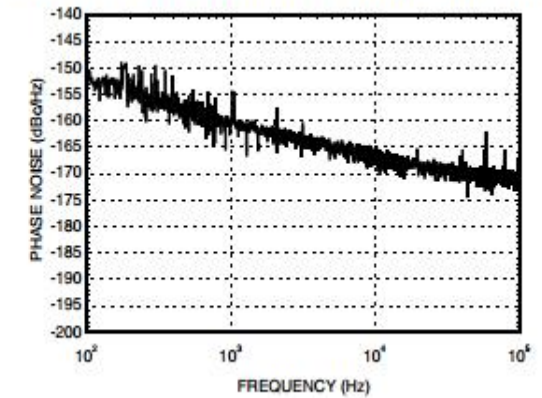
Notes: SPEC ARE SUBJECT TO
CHANGE WITHOUT NOTICE.

Typical Performance Data:

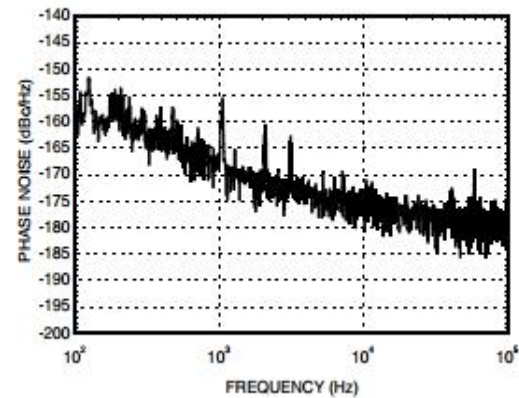
Output IP3 vs. Temperature



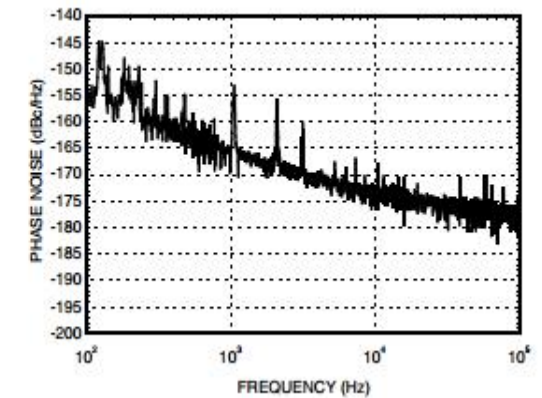
Phase Noise at Pout = 10 dBm @ 10 GHz



Phase Noise at Pout = P1dB @ 10 GHz



Phase Noise at Pout = Psat @ 10 GHz



Environmental Ratings:

Temperature:	-25°C to +71 °C Operating
	-65 °C to +100 °C Non-Operating
Vibration:	MIL-STD-202F, Method 204D Cond. B
Altitude:	MIL-STD-202F, Method 105C Cond. B
Temperature Cycle:	MIL-STD-202F, Method 107D Cond. A

LOW PHASE NOISE AMPLIFIER CLPA-6G12G-1145-S

DRAWN:	DWG NO.:	REV CODE: Rev.1.0
CHECKRD:	DATE: 08/07/15	SHEET : 1 OF 1
ISSUED:	SIZE: A	SCALE : N / A

CONNPHY
Microwave Inc.
www.connphy.com
sales@connphy.com

Notes: SPEC ARE SUBJECT TO
CHANGE WITHOUT NOTICE.