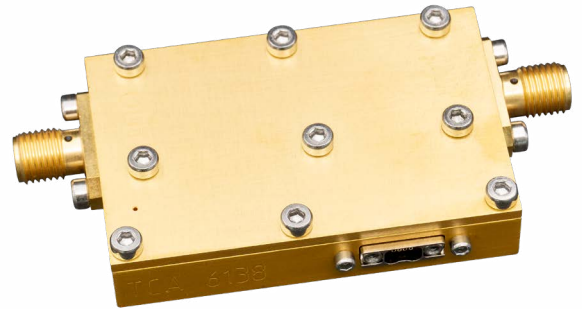


C BAND CRYO-LNA RANGE FOR RADIOASTRONOMY & QUANTUM COMPUTING

Using **cutting-edge technology**, the new cryo-LNA family offers outstanding performance in cryogenic operations



INNOVATIVE TECHNOLOGY

A combination of Indium Phosphide (InP) and Gallium Arsenide (GaAs) technologies to deliver outstanding low Noise Temperature (NT).

Each unit is fully tested in cryogenic operating temperatures and delivered with a complete factory acceptance test report at 295 K and 12 K.

TECHNICAL SPECIFICATIONS

ELECTRICAL

Operating frequency range	4-8 GHz
Noise temperature	<4 K at 12 K
Input return loss (50 Ω)	<-6 dB
Output return loss (50 Ω)	<-15 dB
Gain	38 to 40 dB
Gain flatness	1 dB pp max
Reverse isolation	<-60 dB

POWER SUPPLY

Drain voltage range	≤0.45 V
Drain current range	≤12 mA
Gate voltage range	-2 to +2 V
Power consumption	≤3.8 mW
Power biasing	2 wires (one for V_D and one for V_G)

INTERFACES & PHYSICAL

Dimensions (L x W x H)	46 x 29 x 9 mm (with DC nano connector)
Weight	36 gr
Interfaces	RF input: SMA (f) / SMA (m) RF output: SMA (f) / SMA (m) DC: Nano D 9-P / Micro D 9-P

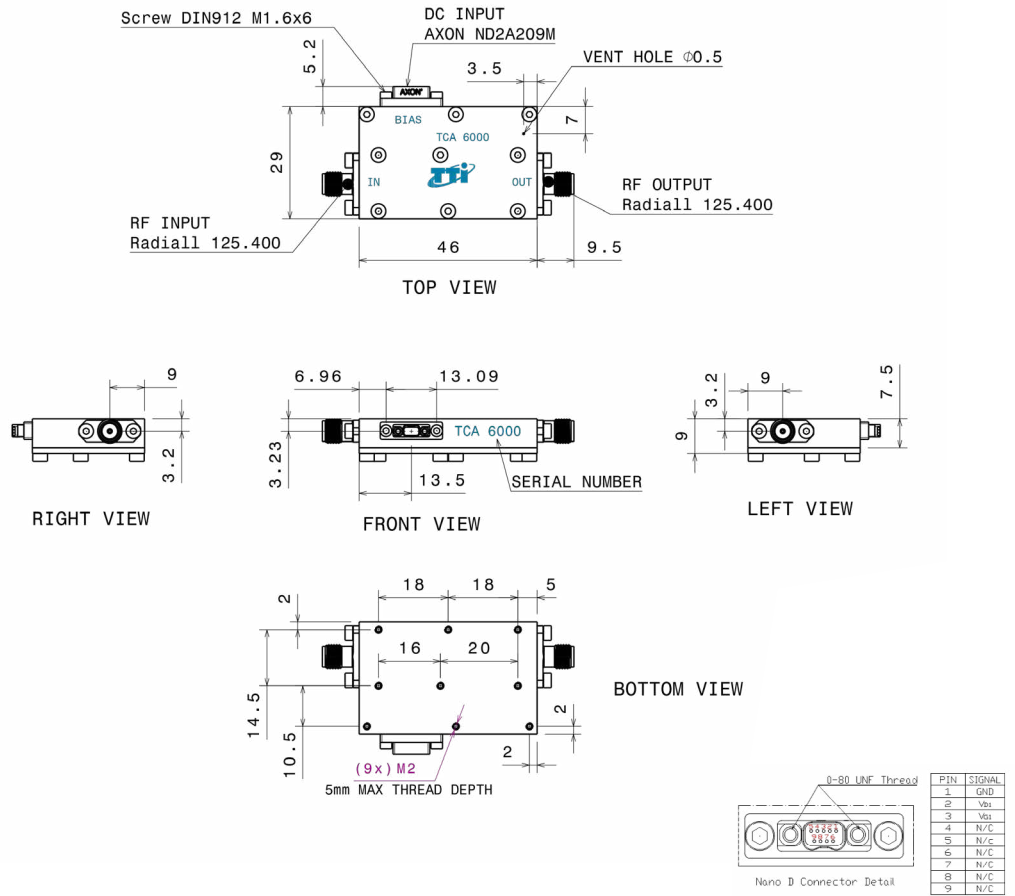
ENVIRONMENTAL

Operating temperature	2 K to 15 K
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KEY FEATURES

- * InP/GaAs technology
- * Extremely low temperatures operation (4 to 15 K)
- * Superior performance
- * High reliability & efficiency
- * Ultra-low noise figure
- * High gain & low ripple
- * Compact size & lightweight

OUTLINE DRAWING

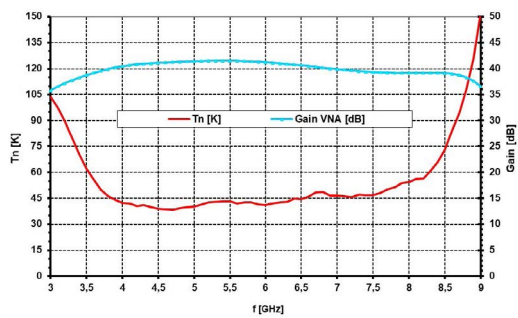


OPTIONS

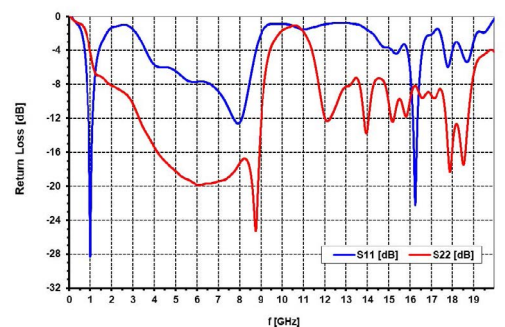
- * Micro or Nano DC connector
- * Servo-controlled power supply unit

TYPICAL MEASURED DATA

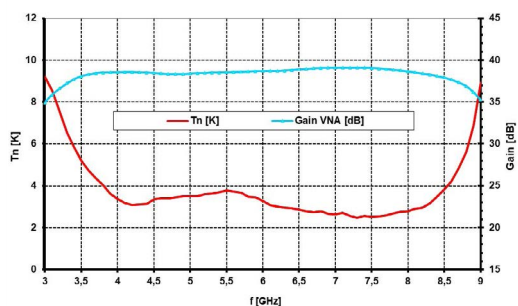
Gain & Noise variation at 295 K



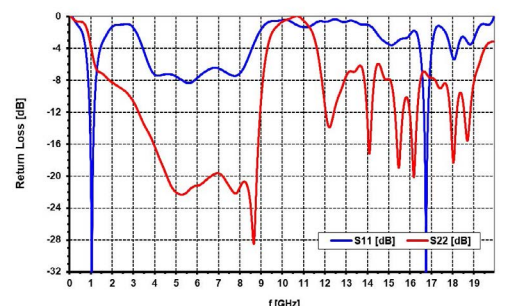
Input & output return losses at 295 K



Gain & Noise variation at 12 K



Input & output return losses at 12 K



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NOTICE

Information contained in this document is subject to change without notice.

Dimensions are in mm and after treatment Tolerance according to ISO 2768-f.