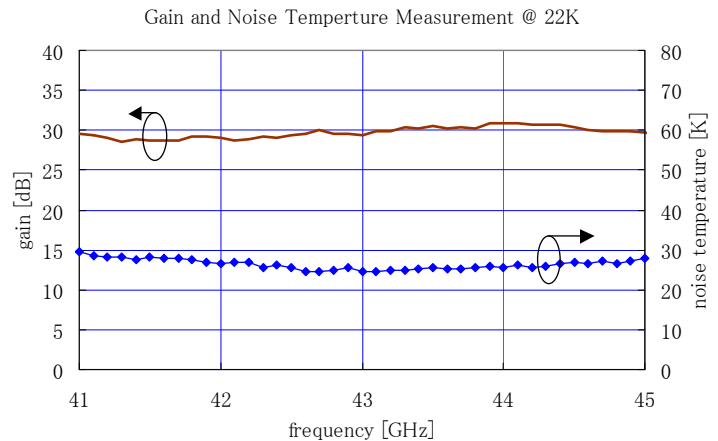


MODEL 9837QC COOLED LOW NOISE AMPLIFIER

Product Description

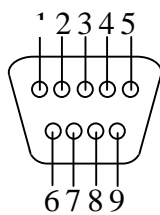
Ultra low noise operation in an extremely low temperature ambience has been realized through the use of the Indium-Phosphide High Electron Mobility Transistor (InP HEMT).



Specifications (for the operational temperature of 15 to 25K)

Frequency Range;	41 ~ 45GHz
Gain;	25dB min
Noise Temperature;	35K max (25~30K typical)
Input/ Output Return Loss	5dB min
RF Input	WR-22 Waveguide UG-383/U Flange
RF Output Connector;	2.4mm Connector (female)
Bias Input Connector;	Micro-D Connectors-MIL-DTL-83513 9pin (MDM-9PSP)

Bias Setting



Connector pin assignment

Face View of MDM-9PSP

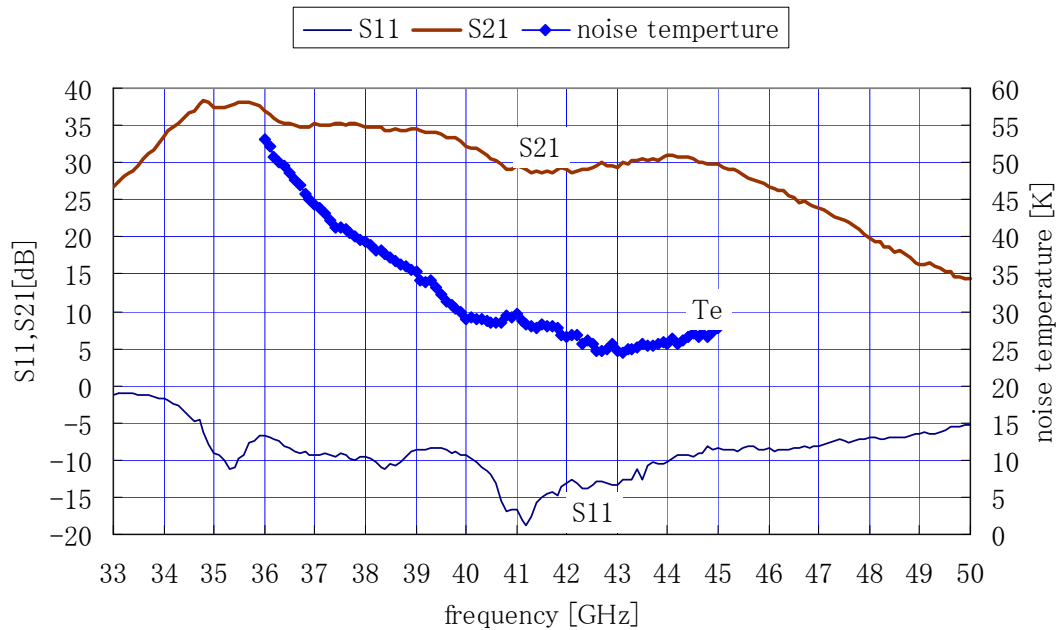
Pin No.	Parameter	Symbol	Pin No.	Parameter	Symbol
1	GND	GND	6	Gate Voltage	VG1
2	Drain Voltage	Vd1	7	Gate Voltage	VG2
3	Drain Voltage	Vd2	8	—	NC
4	—	NC	9	—	NC
5	—	NC			

Bias Values(typical)

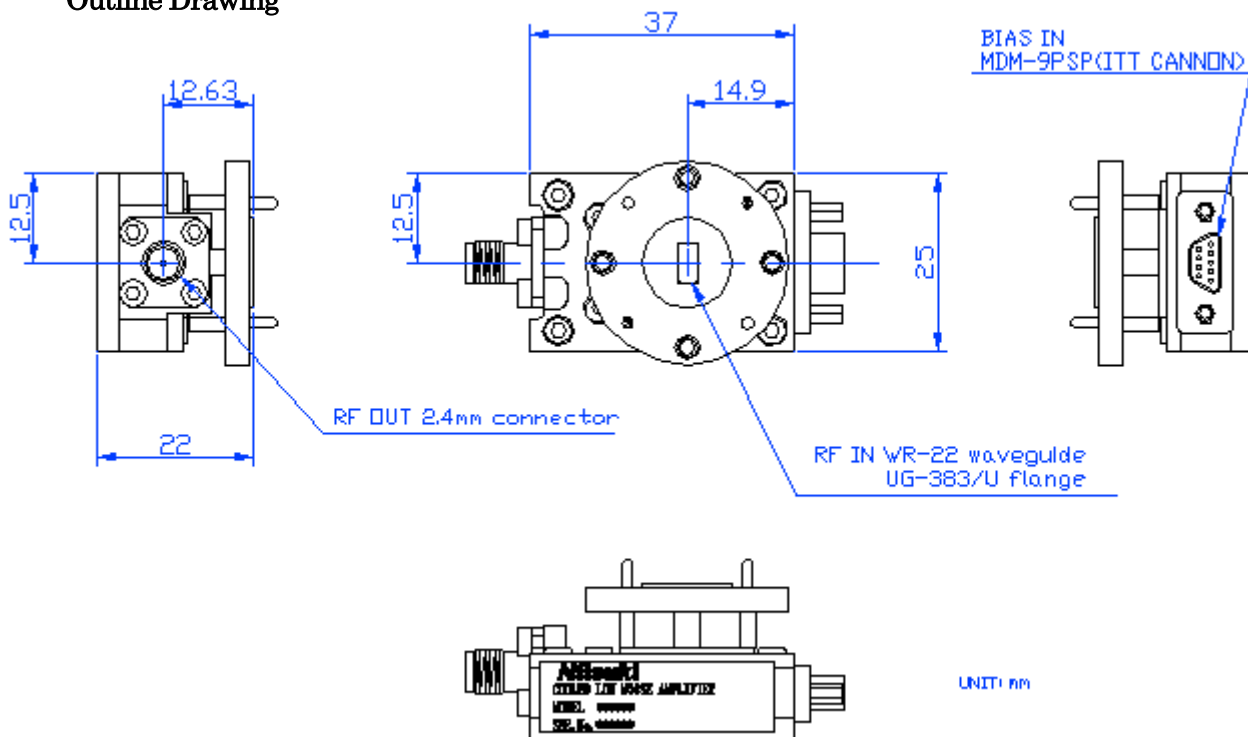
Vd1:	0.7V	Drain Current(Id1)	6mA
Vd2:	1.0V	Drain Current(Id2)	10mA
Vg1:	+0.15V		
Vg2:	+0.15V		

Measured Data at Cryogenic temperature

22K, Vd1=0.7V, Vd2=1V, Vg1=Vg2=+0.15V, Id1=5.6mA, Id2=10.7mA



Outline Drawing



日本通信機株式会社
Japan Communication Equipment Co.,Ltd.

Head Office : 7-4-12, Fukami-Nishi, Yamato, Kanagawa 242-0018, JAPAN Phone: +81-46-260-3150 (Sales Department)
E-mail: eigyou@nitsuki.com

Factory: 4005, Nakatsu, Aikawa, Aiko, Kanagawa 243-0303, JAPAN Phone: +81-46-286-6605 (Engineering Department)

Osaka Office: 22-22-202, Hiroshiba-chou, Suita, Osaka 564-0052, JAPAN Phone: +81-6-6338-7263

Korea Office: #901, Koryo-bldg, 44-12, Yeouido-dong, Yeongdeungpo-gu, Seoul, 150-890, KOREA. Phone: +82-2-784-7765