

## Impedance-matched Josephson Parametric Amplifier

**SMA,6.2-6.6GHz,Gain:17dB,Noise Temperature:400mK**

IMPA is a low-temperature superconducting Josephson parametric amplifier with quantum limit noise performance. It uses standard SMA packaging. It can be widely applied in the fields of non-destructive readout amplification of superconducting quantum computing signals, microwave (single) photon detection and amplification, and detection of extremely weak microwave signals.

### Features:

- Bandwidth:≥400MHz
- Noise Temperature:400mK



### Applications:

- Dilution refrigerators/Cryogenic devices
- Quantum Computing

### Electrical Characteristics:

参数Parameter	Min.	Typ.	Max.	单位Units
Frequency range	6.2		6.6	GHz
Gain	17			dB
Bandwidth	400			MHz
Noise Temperature		400		mK
Saturation Power		-115		dBm

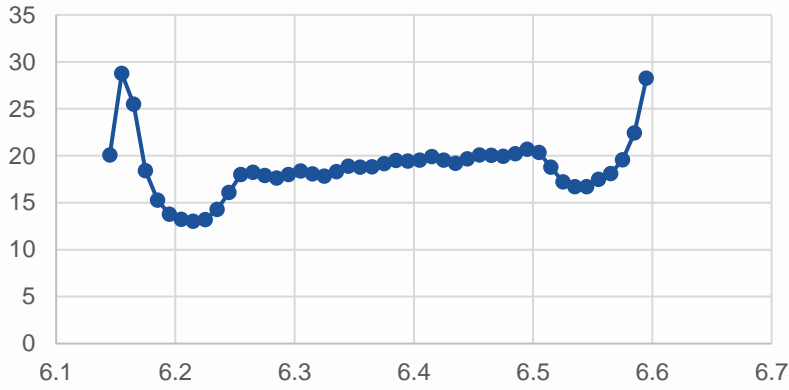
Talent can provide Multi-Channel RF Synthesizers as RF Pump Source

### Environmental And Physical Characteristics:

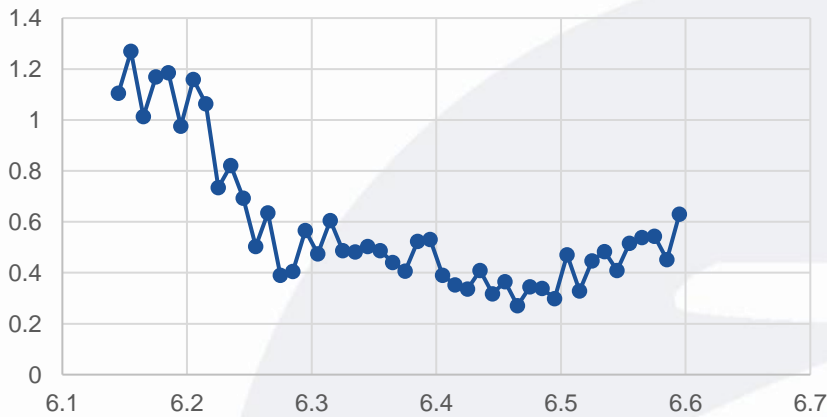
Description	Parameter	Units
Operating Temperature	≤200	mK
Storage Environment	High vacuum	
Connector	SMA Female	

**Measured data :**

**Gain**



**Noise Temperature**



**Ordering Information:**

Base Number	Description	Revision
TL-IMPA6.2G6.5G-17	Impedance-matched Josephson Parametric Amplifier SMA,6.2-6.6GHz,Gain:17dB,Noise Temperature:400mK	Rev.1.1
Customized model	Customize according to user requirements(1-12GHz)	Rev.1.1