

# QFS-200-15000-4

## 0.2~15GHz

**Features:**  
 \* High Frequency Stability  
 \* Ultra Low Phase Noise

**Applications:**  
 \* Wireless  
 \* Transceiver  
 \* Laboratory Test  
 \* Radar

### Electrical

Output Frequency:	0.2~15GHz
Step:	0.1Hz
Switching Speed:	500µS max.
Output Power:	0±4dBm
Frequency Stability:	same as reference
Output Spurious:	-70dBc max.
Output Harmonic:	-5dBc max.
External Reference:	10 or 100MHz
Reference Power:	7±3dBm
Reference Phase Noise:	-125dBc/Hz max. @100Hz -155dBc/Hz max. @1KHz -165dBc/Hz max. @10KHz -165dBc/Hz max. @100KHz -170dBc/Hz max. @1MHz
Voltage:	+12±0.5V DC +15V DC max.
Current:	2.2A max.(first) 1.95A max.(stable)
Control Type:	SPI
Impedance:	50Ω

Freq. Offset	Output Phase Noise(dBc/Hz)				
	0.5GHz	1GHz	5GHz	10GHz	15GHz
100Hz	-116	-112	-97	-92	-89
1KHz	-138	-134	-122	-118	-113
10KHz	-146	-143	-132	-126	-122
100KHz	-146	-143	-132	-126	-122
1MHz	-146	-143	-132	-126	-122

### Mechanical

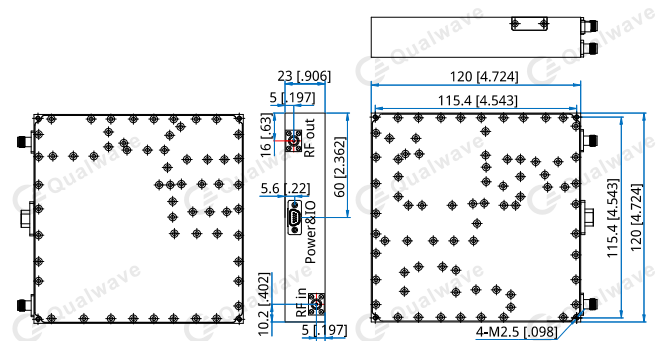
Size*1:	120*120*23mm 4.724*4.724*0.906in
RF Connectors:	SMA Female (removable)
Power & Control Interface:	J30J-9-ZKP
Mounting:	4-M2.5 Through hole

[1] Exclude connectors.

### Environmental

Operating Temperature:	-40~+70°C
Non-operating Temperature:	-55~+85°C

### Outline Drawings



Unit: mm [in]  
 Tolerance: ±0.2mm [±0.008in]

### Pin Numbering

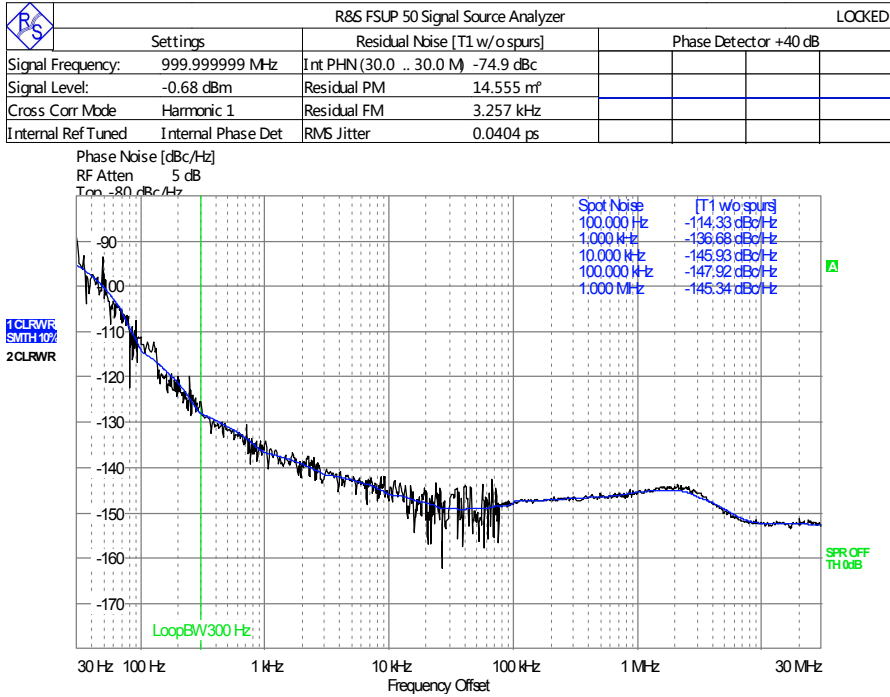
Pin	Function
1	+12V
2	+12V
3	GND
4	GND
5	LD (Locked: high voltage)
6	MOSI (SPI communication interface)
7	MISO (SPI communication interface)
8	SCK (SPI communication interface)
9	LE (SPI communication interface)

### How To Order

**QFS-200-15000-MS-4** - 100MHz  
**QFS-200-15000-MS-4-1** - 10MHz

Customization is available upon request.

## Typical Performance Curves: 1GHz Phase Noise (dBc)



## 10GHz Phase Noise (dBc)

