

QFS-200-15000-3

0.2~15GHz

Features:

- * High Frequency Stability
- * Ultra Low Phase Noise

Applications:

- * Wireless
- * Transceiver
- * Laboratory Test
- * Radar

Electrical

Output Frequency:	0.2~15GHz
Step:	0.1MHz
Switching Speed:	200µs max.
Output Power:	0±4dBm
Frequency Stability:	same as reference
Frequency Accuracy:	same as reference
Output Spurious:	-65dBc max.
Output Harmonic:	-5dBc max.
External Reference:	100MHz
Reference Power:	7±3dBm
Reference Phase Noise:	-155dBc/Hz max. @1kHz
Voltage:	+12±0.5V DC
Current:	1.3A (work)
Current:	1.8A (first)
Control Type:	SPI
Impedance:	50Ω

Offset	Freq.	Output Phase Noise(dBc/Hz)			
		1GHz	5GHz	10GHz	15GHz
100Hz		-112	-98	-92	-88
1KHz		-130	-116	-112	-108
10KHz		-138	-125	-120	-115
100KHz		-138	-125	-120	-115
1MHz		-138	-125	-120	-116

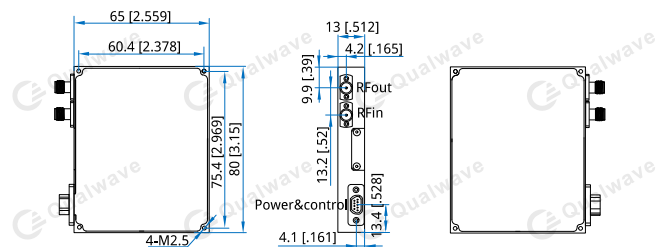
Mechanical

Size*1:	80*65*13mm
	3.15*2.559*0.512in
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

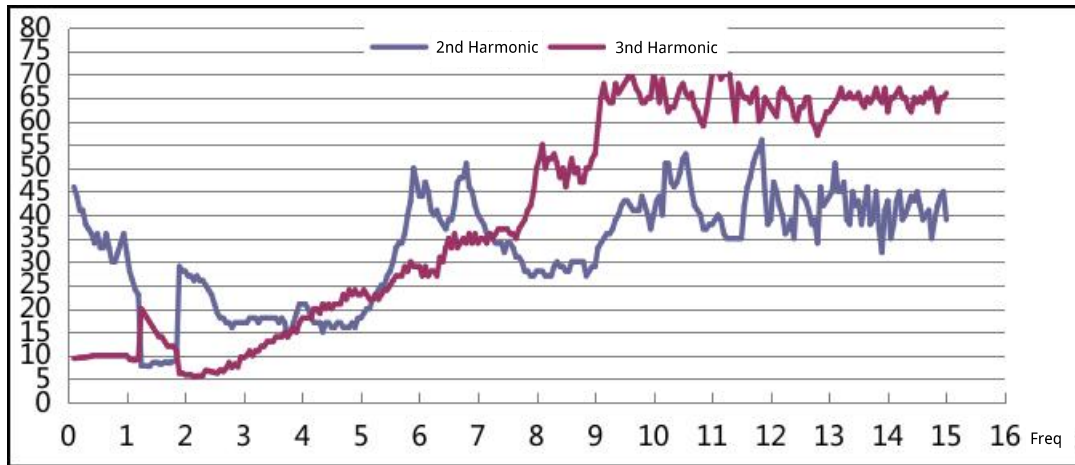
Pin	Function
1	+12V
2	+12V
3	GND
4	GND
5	LD (Locked: high voltage)
6	MOSI (SPI communication interface)
7	MISO (SPI communication interface)
8	SCK (SPI communication interface)
9	LE (SPI communication interface)

How To Order

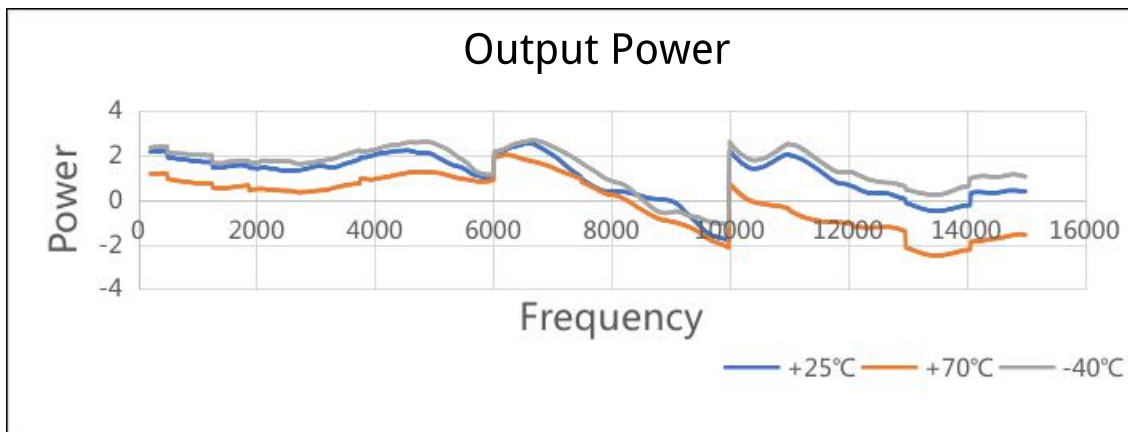
QFS-200-15000-MS-3

Customization is available upon request.

Typical Performance Curves:
2&3rd Harmonic (dBc)



Output Power (dBm)



10GHz Phase Noise (dBc)

R&S FSUP 50 Signal Source Analyzer						LOCKED
Settings		Residual Noise [T1 w/o spurs]		Spur List		
Signal Frequency:	10.000000 GHz	Int PHN (100.0 .. 1.0 M)	-63.8 dBc	100.024 Hz	-57.92 dBc	
Signal Level:	0.42 dBm	Residual PM	52.102 nF	150.032 Hz	-68.70 dBc	
Cross Corr Mode	Harmonic 1	Residual FM	509.378 Hz	200.011 Hz	-81.29 dBc	
Internal Ref Tuned	Internal Phase Det	RMS Jitter	0.0145 ps	249.937 Hz	-85.72 dBc	

