

QFS-200-14600-MS

0.2~14.6GHz

Features:
 * High Frequency Stability
 * Ultra Low Phase Noise

Applications:
 * Wireless
 * Transceiver
 * Laboratory Test
 * Radar

Electrical

Output Frequency:	0.2~14.6GHz
Step:	0.1Hz
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. -40dBc max. @(7.3G~14.6GHz 1/2&3/2 th Harmonic)
External Reference:	100MHz
Reference Power:	7±3dBm
Reference Phase Noise:	-155dBc/Hz max. @1kHz
Voltage:	+12±0.5V DC +15V DC max.
Current:	1A typ.
Control Type:	SPI
Impedance:	50Ω

		Output Phase Noise(dBc/Hz)			
		Freq.			
Offset	Freq.	1GHz	5GHz	10GHz	14.6GHz
100Hz		-108	-96	-90	-87
1KHz		-127	-113	-107	-104
10KHz		-137	-123	-117	-112
100KHz		-137	-123	-117	-112
1MHz		-146	-136	-130	-126

Mechanical

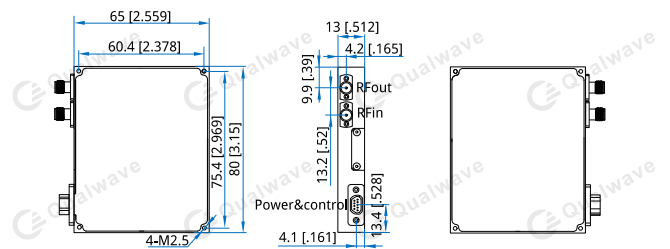
Size ^{*1} :	80*65*13mm 3.15*2.559*0.512in
RF Connectors:	SMA Female (removable)
Power & Control Interface:	J30J-9-ZKP
Mounting:	4-M2.5 Through hole

[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

Customization is available upon request.

Typical Performance Curves: 10GHz Phase Noise (dBc)

R&S FSUP 50 Signal Source Analyzer				LOCKED			
Settings		Residual Noise [T1 w/o spurs]		Phase Detector +0 dB			
Signal Frequency:	10.000000 GHz	Int PHN (100.0 .. 30.0 M)	-61.4 dBc				
Signal Level:	-0.93 dBm	Residual PM	68.580 m°				
Cross Corr Mode	Harmonic 1	Residual FM	2.784 kHz				
Internal Ref Tuned	Internal Phase Det	RMS Jitter	0.0191 ps				

