

QFS-200-15000-1

0.2~15GHz

Features:
 * High Frequency Stability
 * Ultra Low Phase Noise

Applications:
 * Wireless
 * Transceiver
 * Laboratory Test
 * Radar

Electrical

| | |
|------------------------|---|
| Output Frequency: | 0.2~15GHz |
| Step: | 1Hz |
| Switching Speed: | 500µS max. (6~15GHz: 250µS max. 2~6GHz: 300µS max. 1~2GHz: 350µS max. 0.2~1GHz: 500µS max.) |
| Output Power: | 1±6dBm@25°C 1±8dBm@70°C |
| Frequency Stability: | same as reference |
| Frequency Accuracy: | same as reference, 0.04Hz |
| Output Spurious: | -60dBc max. |
| Output Harmonic: | -5dBc max. |
| External Reference: | 100MHz |
| Reference Power: | 7±3dBm |
| Reference Phase Noise: | -153dBc/Hz max. @1kHz |
| Voltage: | +3.3±0.1V DC +3.4V DC max. |
| Current: | 0.6A (stable) |
| Control Type: | SPI |
| Impedance: | 50Ω |

| | | Output Phase Noise(dBc/Hz) | | | |
|--------|--------|----------------------------|------|-------|-------|
| | | 1GHz | 5GHz | 10GHz | 15GHz |
| Offset | 100Hz | -94 | -80 | -74 | -70 |
| | 1KHz | -105 | -91 | -85 | -81 |
| | 10KHz | -112 | -98 | -92 | -88 |
| | 100KHz | -114 | -100 | -94 | -90 |
| | 1MHz | -130 | -116 | -110 | -106 |

Mechanical

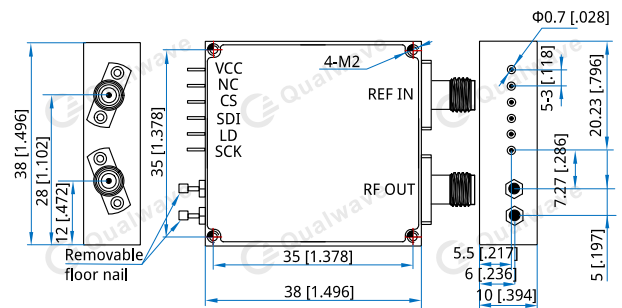
| | |
|----------------------------|-----------------------------------|
| Size*1: | 38*38*10mm 1.496*1.496*0.394in |
| REF Connectors: | SMA Female (removable) |
| Power & Control Interface: | Feed Through/Terminal Post |
| Mounting: | 4-M2 Through hole |

[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

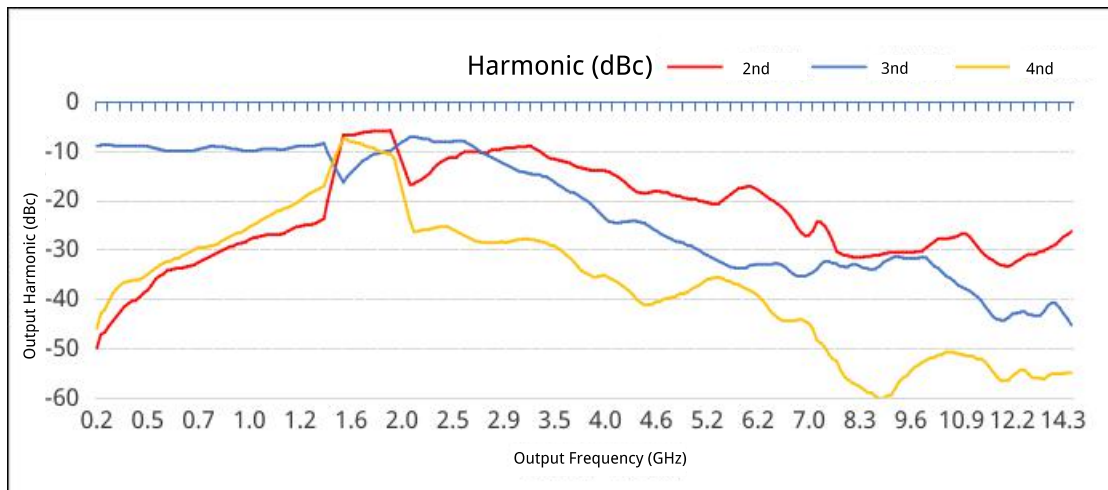
| Pin | Function |
|--------|-----------------------------------|
| VCC | +3.3V |
| NC | Feed Through/Terminal Post (Φ0.7) |
| CS | Feed Through/Terminal Post (Φ0.7) |
| SDI | Feed Through/Terminal Post (Φ0.7) |
| LD-out | Feed Through/Terminal Post (Φ0.7) |
| SCK | Feed Through/Terminal Post (Φ0.7) |

How To Order

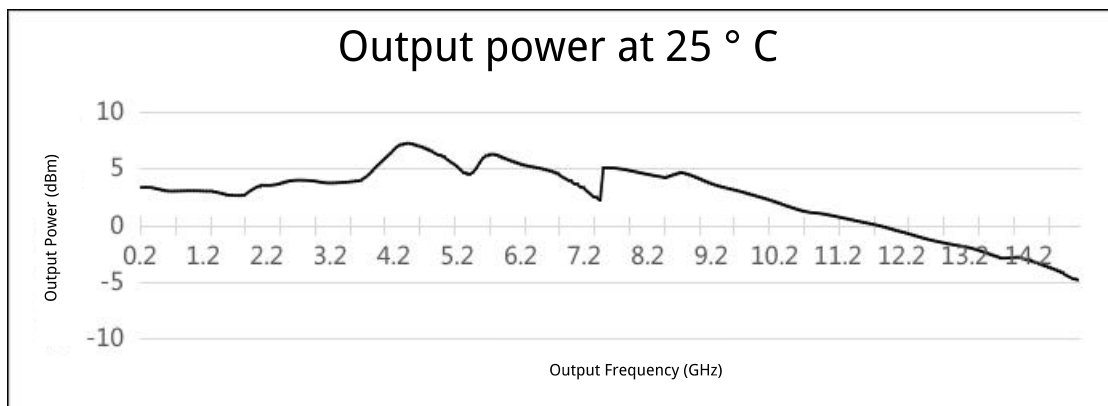
QFS-200-15000-MS-1

Customization is available upon request.

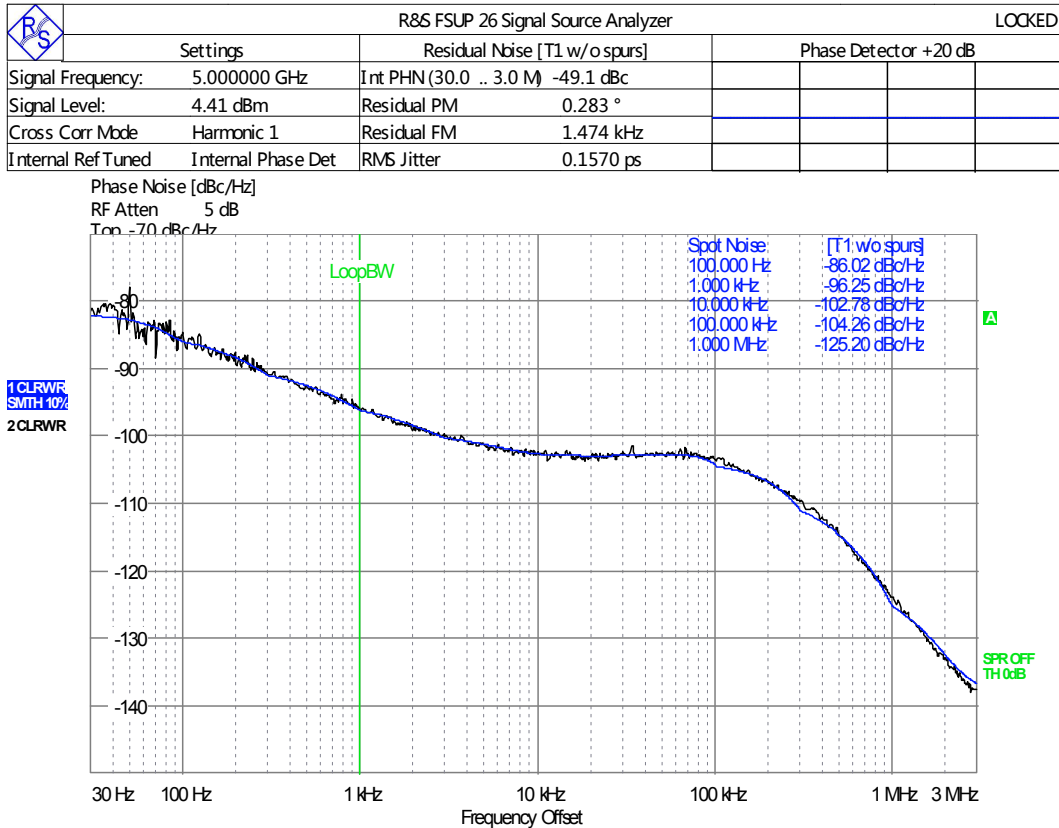
**Typical Performance Curves:
2&3&4th Harmonic (dBc)**



Output Power (dBm)



5GHz Phase Noise (dBc)



10GHz Phase Noise (dBc)

