Qualwave

Phase-locked Dielectric Resonator Oscillator

QPDO-I-80-15.36

Internal Reference, 80MHz, 15.36GHz

Features:
* High Frequency Stability
* Ultra Low Phase Noise

Applications:
* Wireless
* Transceiver
* Laboratory Test
* Radar

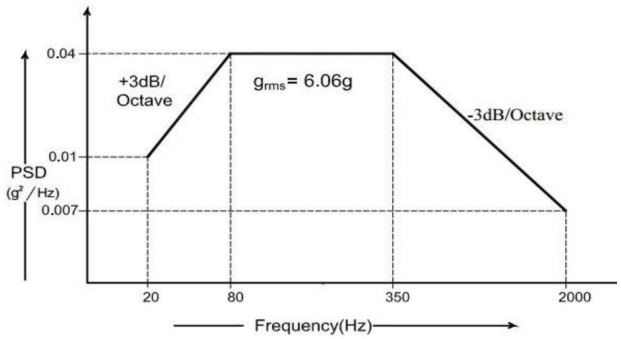
Electrical

Output Frequency:	15.36GHz
Frequency Stability:	±1ppm max. (Full temperature)
Output Power:	+14.5±1dBm (Full temperature)
Reference Output Phase Noise:	-90dBc/Hz@10Hz max.
	-125dBc/Hz@100Hz max.
	-160dBc/Hz@1KHz max.
Internal Reference:	80MHz
Reference Output Power:	7dBm min.
Reference Output Harmonic:	-30dbc max.
Output Harmonic:	-40dBc max.
	@7.68GHz, 23.04GHz
Output Spurious:	-75dBc max. @±1GHz
Voltage:	+12V DC
Current:	800mA max. (first)
	500mA max. (stable)
Lock Indicator (LI):	TTL logic
	High: locked
	Low: unlocked

Phase Noise:

Vibration noise	Typical Value
-50dBc/Hz@100Hz max.	-70dBc/Hz@100Hz max.
-65dBc/Hz@1KHz max.	-100dBc/Hz@1KHz max.
-100dBc/Hz@5KHz max.	-110dBc/Hz@5KHz max.
-105dBc/Hz@10KHz max.	-110dBc/Hz@10KHz max.
-110dBc/Hz@500KHz max.	-115dBc/Hz@500KHz max.
-130dBc/Hz@1MHz max.	-130dBc/Hz@1MHz max.

Typical Performance Curves[*2]



[2] The vibration noise coefficient meets the requirements in the attached figure (1KHz-1MHz offsets).

Mechanical

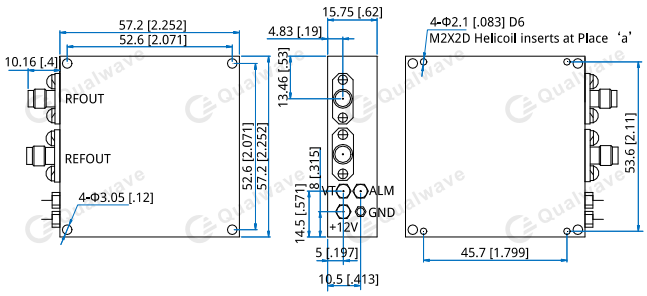
Size[*1]:	57.2*57.2*15.75mm
	2.252*2.252*0.62in
Connectors:	SMA female
Power Supply Interface:	Feed Through/Terminal Post
Mounting:	4-Φ3.05mm through-hole

[1] Exclude connectors.

Environmental

Operating Temperature:	-40~+75℃
Non-operating Temperature:	-55~+85℃

Outline Drawings



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

How To Order

QPDO-I-80-15.36

Customization is available upon request.