



ELECTRICAL SPECIFICATIONS

FREQUENCY RANGE: 6-12 GHz
 FREQUENCY STEP: 5 MHz
 ATTENUATION RANGE: 31 dB
 ATTENUATION STEP: 1 dB
 SWITCHING TIME: 100 μs
 OUTPUT POWER: +15 dBm ± 1dB
 OUTPUT RETURN LOSSES: 14 dB
 HARMONIC LEVEL: -35 dBc min.
 SUBHARMONICS: N/A
 SPURIOUS LEVEL: -70 dBc typ. (Freq. multiple of 100 MHz)
 -40 dBc (Any frequency)

PHASE NOISE (Typical)

	@6 GHz	@9 GHz	@12 GHz	Unit
1 KHz	-91	-90	-86	dBc/Hz
10 KHz	-107	-104	-101	dBc/Hz
100 KHz	-108	-105	-102	dBc/Hz
1 MHz	-121	-120	-115	dBc/Hz
5 MHz	-136	-134	-130	dBc/Hz

TEMPERATURE STABILITY:

±0.28 ppm (INTERNAL CLK)
 AGING: ±3 ppm (20 years - INTERNAL CLK)

SUPPLY VOLTAGE:

+5 VDC ± 10%

POWER CONSUMPTION:

3 W

DIGITAL CONTROL:

TTL compatible

CONNECTORS:

SMA (F)
 SAMTEC TFM 10x2

PIN FUNCTIONS:

P1: F11 = 5 MHz
 P3: F10 = 10 MHz
 P5: F9 = 20 MHz
 P7: F8 = 40 MHz
 P9: F7 = 80 MHz
 P11: F6 = 160 MHz
 P13: Enable
 P15: A2 = 2 dB
 P17: A4 = 8 dB
 P19: +5 V
 P2: Locked
 P4: F1 = 5120 MHz
 P6: F2 = 2560 MHz
 P8: F3 = 1280 MHz
 P10: F4 = 640 MHz
 P12: F5 = 320 MHz
 P14: A1 = 1 dB
 P16: A3 = 4 dB
 P18: A5 = 16 dB
 P20: GND

Freq = 6 GHz + ΣFi, i corresponds to active frequencies
 Att = ΣAi, i corresponds to active attenuation levels

ENVIRONMENTAL RATINGS

- TEMPERATURE: -20°C TO +70°C (OPERATING)
 -40°C TO +85°C (STORAGE)
 - HUMIDITY: MIL-STD-202G, METHOD 103B COND. B
 - SHOCK: MIL-STD-202G, METHOD 213B COND. B
 - VIBRATION: MIL-STD-202G, METHOD 204D COND. B
 - ALTITUDE: MIL-STD-202G, METHOD 105C COND. B
 - TEMP. SHOCK: MIL-STD-202G, METHOD 107G COND. A



NOTE: The above specifications are subject to change or revision. Specifications are at 25°C unless stated otherwise

	QP microWAVE CÓLQUIDE 6 28231 LAS ROZAS MADRID, SPAIN	APPROVALS	DATE	SIGNED	DESCRIPTION: 6 - 12 GHz FREQ. SYNTHESIZER	REV.:	SHEET:
		DRAW	14/09/22	CRU	CODE: QP-FSPLM-0612-01	00C	1 OF 1
		CHECKED	14/09/22	BME			
		APPROVED	14/09/22	JAV			