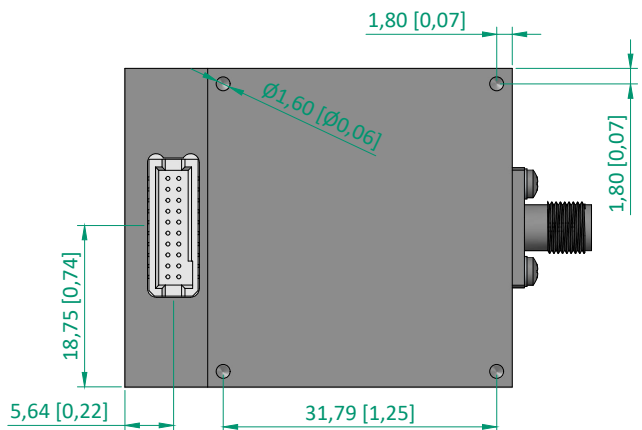
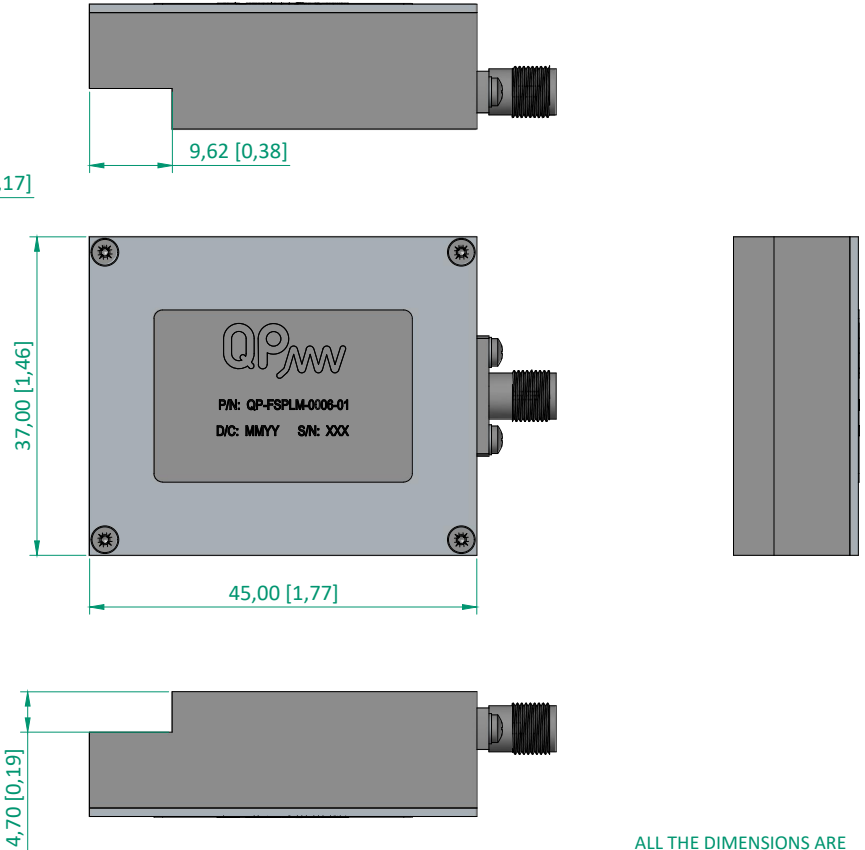
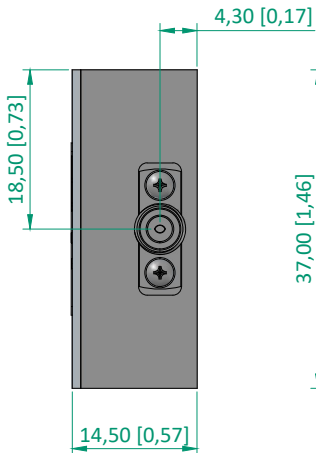


ISO VIEW



BOTTOM VIEW



ALL THE DIMENSIONS ARE SHOWN IN mm [in]  
SCALE 1.5:1

**ELECTRICAL SPECIFICATIONS**

FREQUENCY RANGE: 15 MHz - 6.4 GHz  
 FREQUENCY STEP: 5 MHz  
 ATTENUATION RANGE: 32 dB  
 ATTENUATION STEP: 1 dB  
 SWITCHING TIME: 100 μs  
 OUTPUT POWER: +13 dBm ± 1 dBm  
 OUTPUT RETURN LOSSES: 14 dB  
 HARMONIC LEVEL: -30 dBc @ 2.2 - 6.4 GHz  
 NO SUBHARMONICS  
 SPURIOUS LEVEL: -70 dBc typ. (Freq. multiple of 80 MHz)  
 -40 dBc (Any frequency)

PHASE NOISE (Typical)

	@1 GHz	@3 GHz	@6 GHz	Unit
1 KHz	-104	-93	-87	dBc/Hz
10 KHz	-116	-105	-98	dBc/Hz
100 KHz	-118	-108	-102	dBc/Hz
1 MHz	-140	-130	-123	dBc/Hz
5 MHz	-150	-145	-140	dBc/Hz

TEMPERATURE STABILITY: ±0.28 ppm  
 AGING: ±3 ppm (20 years)

SUPPLY VOLTAGE: +5 VDC ± 10%  
 POWER CONSUMPTION: 2.5 W  
 DIGITAL CONTROL: TTL compatible

CONNECTORS: SMA (F)  
 SAMTECH TFM 10x2

PIN FUNCTIONS:

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

$F_{out} = (P1 * F1) + \dots + (P16 * F16)$

**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 CÔLQUIDE 6 28231 LAS ROZAS MADRID, SPAIN	APPROVALS	DATE	SIGNED	DESCRIPTION: 12.5MHz 6.4 GHz FREQ. SYNTHESIZER	REV.:	SHEET:
	DRAWN	04/02/20	CRU	CODE: QP-FSPLM-0006-02	00B	1 OF 1
	CHECKED	04/02/20	BME			
	APPROVED	04/02/20	JAV			