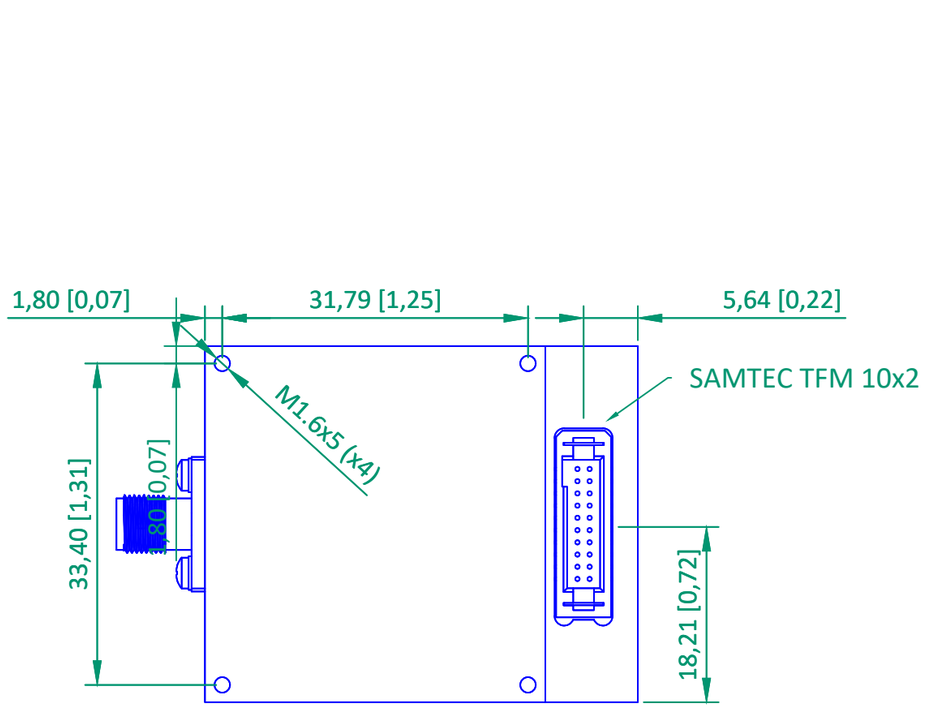
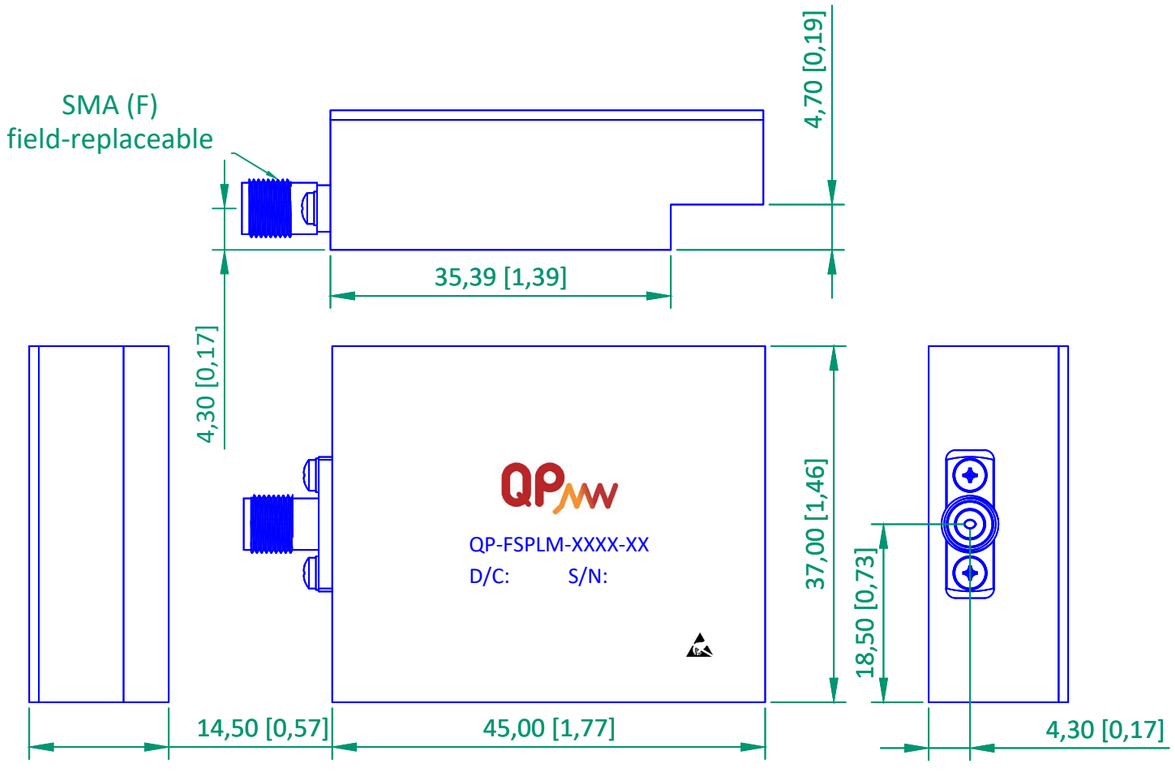
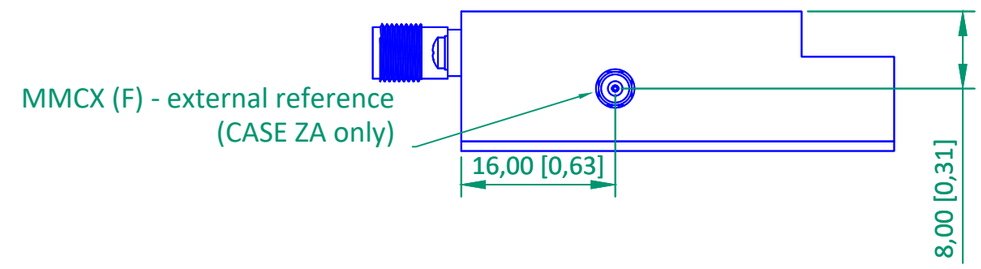


BOTTOM VIEW

ALL THE DIMENSIONS ARE
SHOWN IN mm





ELECTRICAL SPECIFICATIONS

FREQUENCY RANGE:	6-12 GHz
FREQUENCY STEP:	1 Hz
ATTENUATION RANGE:	31.5 dB
ATTENUATION STEP:	0.5 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 with 100 MHz external clock)

	@6 GHz	@9 GHz	@12 GHz	Unit
1 KHz	-96	-95	-90	dBc/Hz
10 KHz	-112	-108	-106	dBc/Hz
100 KHz	-114	-110	-108	dBc/Hz
1 MHz	-125	-122	-118	dBc/Hz
5 MHz	-140	-136	-134	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:	SPI
OPTIONS:	X=0 (INTERNAL CLK) X=1 (10 MHz OR 100 MHz EXTERNAL CLOCK SELECTABLE)
CONNECTORS:	SMA (F) SAMTEC TFM 10x2 MMCX (F)

PIN FUNCTIONS:

P12: ENABLE	P13: GND
P14: SPI_CLK	P15: GND
P16: SPI_SDO	P17: SPI_CS
P18: SPI_SDI	P19: +5 V
P20: GND	

See frequency and attenuation programming in operating instructions

ENVIRONMENTAL RATINGS

- TEMPERATURE:	-20ºC TO +70ºC (OPERATING) -40ºC TO +85ºC (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

CAUTION
STATIC SENSITIVE DEVICE

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

QP microWAVE
CÓLQUIDE 6
28231 LAS ROZAS
MADRID, SPAIN

APPROVALS	DATE	SIGNED
DRAW	14/09/22	CRU
CHECKED	14/09/22	BME
APPROVED	14/09/22	JAV

DESCRIPTION: 6 - 12 GHz FREQ. SYNTHESIZER

CODE: **QP-FSPLM-0612-X2**

REV.: 00C

SHEET: 1 OF 1