



ALL DIMENSIONS SHOWN ARE IN mm

ELECTRICAL SPECIFICATIONS

FREQUENCY RANGE:	0.5 - 40 GHz
ATTENUATION RANGE:	63 dB
ATTENUATION WORD:	7 BITS
ATTENUATION STEP:	0.5 dB
INSERTION LOSS:	6.5 dB MAX. @ 18 GHz 16 dB MAX. @ 40 GHz
ATTENUATION ACCURACY*:	±0.5 dB @ 0.5 - 10-dB ATT STATES ±1 dB @ 10.5 - 30-dB ATT STATES ±2 dB @ 30.5 - 40-dB ATT STATES ±3 dB @ 40.5 - 50-dB ATT STATES ±3.5 dB @ 50.5 - 63-dB ATT STATES & f<35 GHz
TEMPERATURE DRIFT:	0.02 dB/°C
MONOTONICITY:	YES
VSWR:	2:1 TYP.
IIP3 @ Pin=0 dBm:	35 dBm MIN.
IP1dB:	20 dBm MIN.
SWITCHING TIME:	125 ns TYP. 300 ns MAX.
RF INPUT POWER:	+25 dBm CW MAX.

*Referenced to insertion loss

CONNECTORS:

J1, J2 - 2.92mm FEMALE, STAINLESS STEEL
J3 - DE15P MALE
POWER SUPPLY:
+4V TO +12V, 25 mA
-4V TO -12V, 25 mA
DIGITAL CONTROL:
POSITIVE LVTTTL LOGIC
PIN FUNCTIONS:
P1: ATT Control: A1
P2: ATT Control: A2
P3: ATT Control: A3
P4: ATT Control: A4
P5: ATT Control: A5
P6: ATT Control: A6
P7: ATT Control: A7
P8: N/C
P9: GND
P10: EN**
P11: +12V
P12: +12V
P13: GND
P14: -12V
P15: -12V

**EN is active high. It can be also used as a latch signal as long as attenuation data is available 20 ns prior to a rising EN edge.

ENVIRONMENTAL RATINGS

- TEMPERATURE:	-40°C TO +85°C (OPERATING) -55°C TO +125°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: 0.5-40 GHz 63-dB DIGITAL ATTENUATOR	REV.:	SHEET:
DRAW	21/05/21	BME	QP-ATDIG-0040-04	00D	1 OF 1
CHECKED	21/05/21	BME			
APPROVED	21/05/21	JAV			