



ALL DIMENSIONS SHOWN ARE IN mm

ELECTRICAL SPECIFICATIONS

FREQUENCY RANGE: 0.05 - 18 GHz
 ATTENUATION RANGE: 94 dB
 ATTENUATION WORD: 8 BITS
 ATTENUATION STEP: 0.5 dB
 INSERTION LOSS: 4.5 dB MAX. @ 0.5 - 2 GHz
 5.5 dB MAX. @ 2 - 6 GHz
 7 dB MAX. @ 6 - 12 GHz
 8.5 dB MAX. @ 12 - 18 GHz
 ATTENUATION ACCURACY*: ±0.5 dB @ 0.5 - 20-dB ATT STATES
 ±1 dB @ 20.5 - 40-dB ATT STATES
 ±1.5 dB @ 40.5 - 60-dB ATT STATES
 ±2 dB @ 60.5 - 70-dB ATT STATES
 ±3 dB @ 70.5 - 80-dB ATT STATES
 ±4 dB @ 80.5 - 94-dB ATT STATES UP TO 15 GHz
 TEMPERATURE DRIFT: 0.02 dB/°C
 MONOTONICITY: GUARANTEED UP TO 62-dB ATT STATE
 VSWR: 1.5:1 TYP.
 2.2:1 MAX.
 IIP3 @ Pin=0 dBm: 35 dBm MIN.
 IP1dB: 20 dBm MIN.

SWITCHING TIME: 4 µs TYP.
 6 µs MAX.
 RF INPUT POWER: +25 dBm CW MAX.
 CONNECTORS: J1, J2 - SMA FEMALE, STAINLESS STEEL
 J3 - DE15P MALE
 POWER SUPPLY: +12V, 25 mA, -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: ATT Control A8
 P9: GND
 P10: EN**
 P11: +12V
 P12: +12V
 P13: GND
 P14: -12V
 P15: -12V

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

* Referenced to insertion loss
 ** EN can be also used as a latch signal as long as attenuation data is available 20 ns prior to a rising EN edge.

PRELIMINARY DATASHEET



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: DIGITAL ATTENUATOR 0.05-18 GHz	REV.:	SHEET:
		DRAW	07/10/21	BME	CODE: QP-ATDIG-0018-05	000	1 OF 1
		CHECKED	07/10/21	BME			
		APPROVED	07/10/21	JAV			