



ALL DIMENSIONS SHOWN  
ARE IN mm [inch]

**ELECTRICAL SPECIFICATIONS**

FREQUENCY RANGE: 0.5 - 26 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  
 12 dB MAX. @ 18 - 26 GHz  
 ATTENUATION ACCURACY\*:  
 ±0.5 dB @ 0.5 - 20-dB ATT STATES  
 ±1 dB @ 20.5 - 40-dB ATT STATES  
 ±2 dB @ 40.5 - 60-dB ATT STATES  
 ±3 dB @ 60.5 - 70-dB ATT STATES  
 ±4 dB @ 70.5 - 80-dB ATT STATES  
 ±4 dB @ 80.5 - 94-dB ATT STATES & f<15 GHz  
 TEMPERATURE DRIFT: 0.02 dB/°C  
 GUARANTEED MONOTONICITY:  
 UP TO 80-dB ATT STATE @ f<10 GHz  
 UP TO 60-dB ATT STATE @ f<18 GHz  
 UP TO 50-dB ATT STATE @ f<26 GHz

VSWR: 1.5:1 TYP.  
 2.4:1 MAX.  
 IIP3 @ Pin=0 dBm: 40 dBm MIN.  
 IP1dB: 20 dBm MIN.  
 SWITCHING TIME: 125 ns TYP.  
 300 ns MAX.  
 RF INPUT POWER: +25 dBm CW MAX.  
 CONNECTORS:  
 J1, J2 - SMA FEMALE, STAINLESS STEEL  
 J3 - DE15P MALE  
 POWER SUPPLY: +12V, 25 mA (w/o RF), -12V, 25 mA (w/o RF)  
 DIGITAL CONTROL: POSITIVE LVTTTL LOGIC  
 PIN FUNCTIONS:  
 P1: ATT Control A1 P9: GND  
 P2: ATT Control A2 P10: EN\*\*  
 P3: ATT Control A3 P11: +12V  
 P4: ATT Control A4 P12: +12V  
 P5: ATT Control A5 P13: GND  
 P6: ATT Control A6 P14: -12V  
 P7: ATT Control A7 P15: -12V  
 P8: ATT Control A8

**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.



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

	<b>QP microWAVE</b> CÔLQUIDE 6 28231 LAS ROZAS MADRID, SPAIN	APPROVALS	DATE	SIGNED	DESCRIPTION: <b>DIGITAL ATTENUATOR 0.5-26 GHz</b>
		DRAWN	14/02/20	BME	CODE:
		CHECKED	14/02/20	BME	<b>QP-ATDIG-0026-01</b>
		APPROVED	14/02/20	JAV	SHEET: 1 OF 1