



XXATTENPDC

Fixed GPS Attenuator

Technical Product Data



Features

- **Specify Attenuation Value**
Attenuation Range 0 - 20dB
- **Small Form Factor**
2.5 (not including connectors) x 0.75 x 0.875 in.
- **Extremely Flat Group Delay**
Less than 1ns variation
- **Excellent Flatness**
Gain $|L1 - L2| < 1.0$ dB
- **Low SWR** < 1.5dB typical

Description

The XXATTENPDC GPS Fixed Attenuator (GNSS Attenuator) is a one input, one output device that can be specified with a fixed attenuation value between 0 - 20dB in a miniaturized housing. The frequency response covers the GPS L1, L2, L5, Galileo and GLONASS frequencies (entire L-band) with excellent flatness. In the normal configuration, the RF output (J1) passes DC from the connected GPS receiver through the amplifier to the antenna, allowing the GPS receiver to power both the antenna and the mini amplifier.

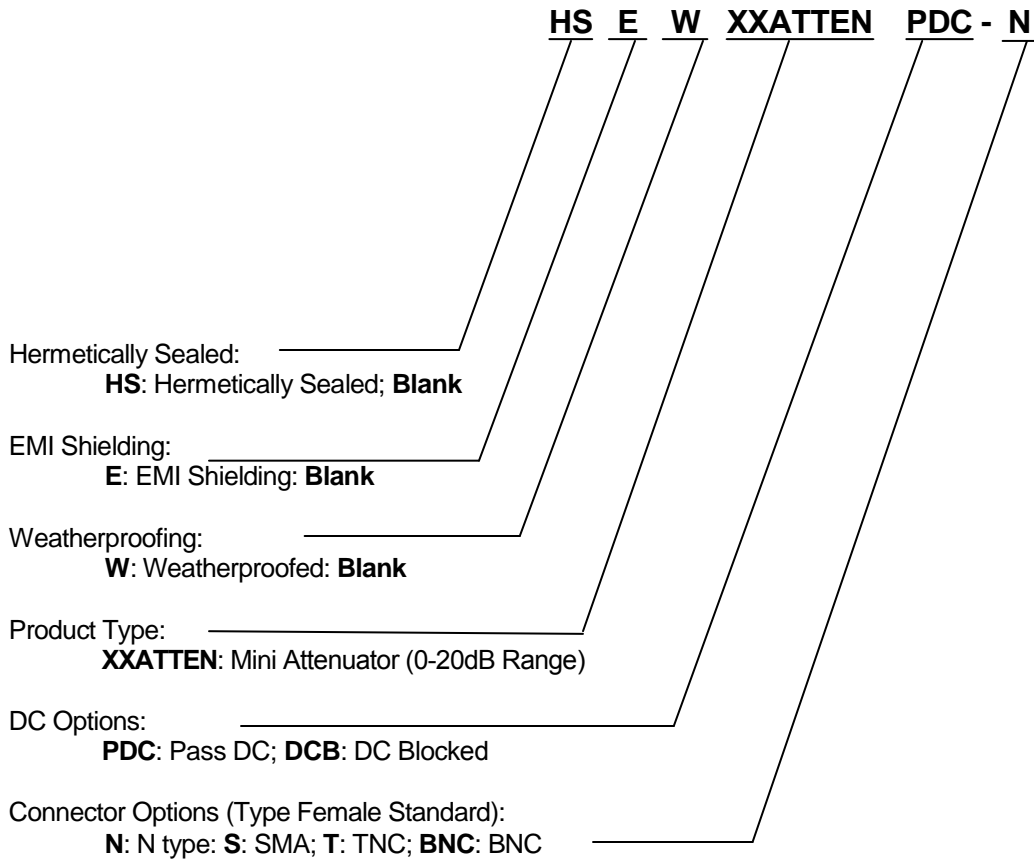
Electrical Specifications, $T_A = 25^{\circ}\text{C}$

Parameter	Conditions	Min	Typ	Max	Units
Freq. Range	Ant – J1	1.1		1.7	GHz
In/Out Imped.	Ant, J1		50		Ω
Attenuation	Ant – J1, Specify attenuation value (X) between 0 - 20dB	X-1	X	X+1	dB
Input SWR	J1 - 50 Ω			1.8:1	-
Output SWR	Ant - 50 Ω			1.8:1	-
Flatness	L1 – L2 ; Ant – J1		0.5	1	dB
Reverse Isolation	J1 – Ant	35			dB
Group delay Flatness	$\tau_{d,max} - \tau_{d,min}$: Ant – J1			1	ns
DC Input Range.	DC Input on J1	3.6		15	Vdc
Current	Amplifier Current Draw, All ports - 50 Ω			15	mA

Available Options

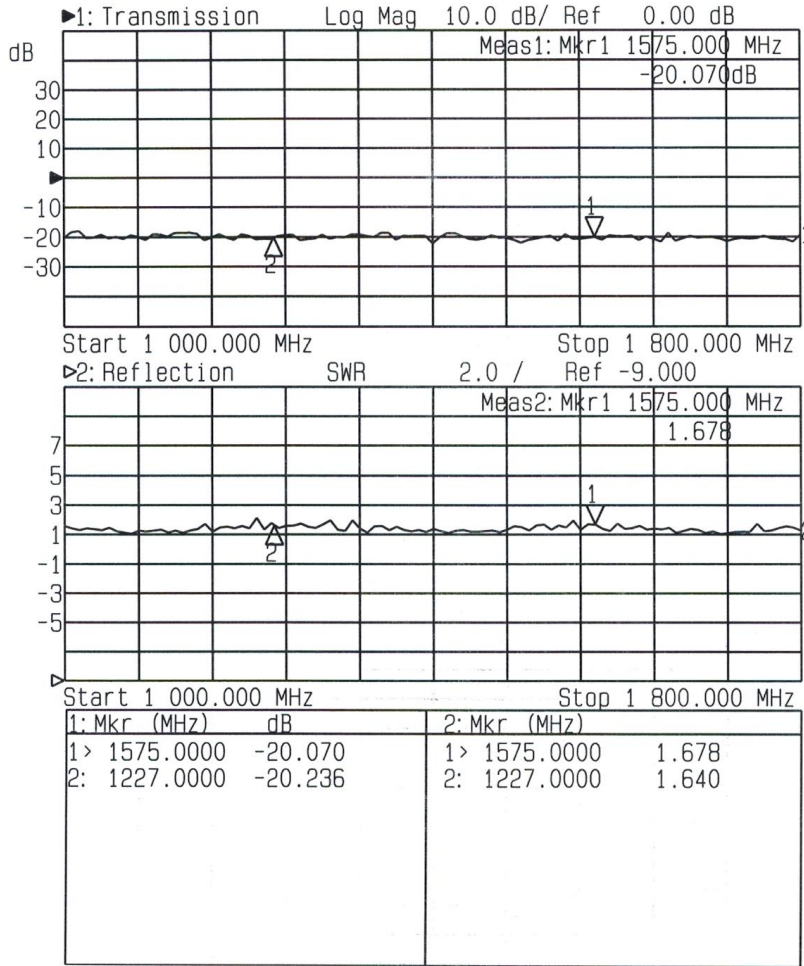
Pass/Block DC Options	
Pass DC - PDC	Pass DC J1 to Ant.
DC Blocked - DCB	DC Blocked
RF Connector Options	
Connector Options	CONNECTOR STYLE
	Type N-female
	Type SMA-female
	Type TNC-female
	Type BNC-female

Part Number



Performance

Input SWR (Ant. Port) and Frequency Response: Ant. To J1 (Typical, type N conn.):

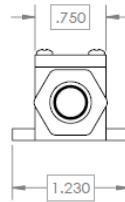
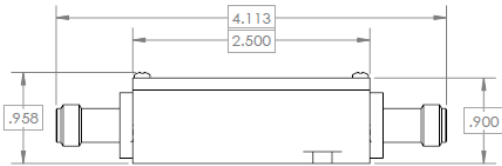
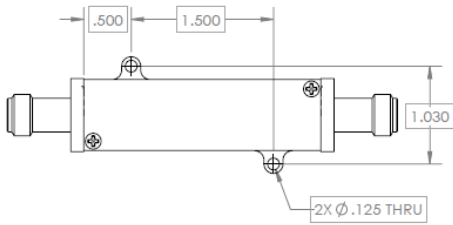


Mechanical

Dimensions: Height: 0.875"
Length (not including connectors) Body: 2.5"
Width: 0.75" (+0.438" including mounting tabs)

Weight: 3.13 oz. (88.7 grams)

Operating Temp. Range: -40° to + 75°C



GPS NETWORKING		ASSY, 1X1 MINI		2x Mini Serial, High Precision AS-BUS, 1000 Sample/Second for 250 Road Miles	
REV: B	08/17/15	Design By:	Proj No:	1000	1000
Character:		Sub:	Proj No:	1000	1000
Scale:	Quantity / Unit Asy:	Material:	Proj No:	1000	1000
Part Name:	Material:	Proj No:	Proj No:	1000	1000
Draw Number:	ASSY, 1X1 MINI	REV: B	SHEET 1 OF 1	1000	1000