VATTENPDC

Variable GPS Attenuator

Technical Product Data

Features

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

Description

The VATTENPDC GPS Variable Attenuator (GNSS Attenuator) is a one input, one output device that operates with a variable attenuation range that can be user selected 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 attenuator to the antenna, allowing the GPS receiver to power both the antenna and the attenuator.

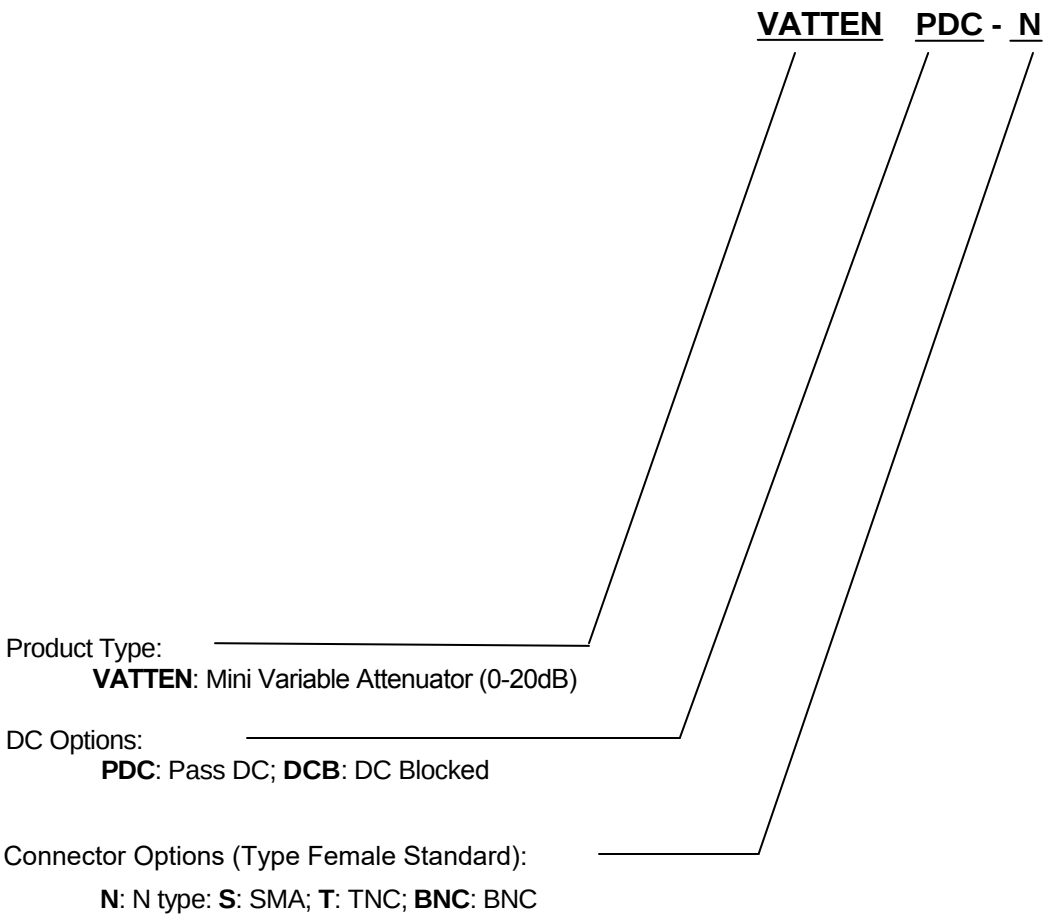
Electrical Specifications, $T_A = 25^0C$

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, User Selected Attenuation value (X) between 0 - 20dB	0	X	20	dB
Input SWR	J1 - 50Ω			2:1	-
Output SWR	Ant - 50Ω			2:1	-
Flatness	| L1 – L2 | ; Ant – J1		0.5	1	dB
Group delay Flatness	$\tau_{d,max} - \tau_{d,min}$: Ant – J1			1	ns
Required DC Input	DC Input on J1	3.6		15	Vdc
Current	Variable Attenuator Current Draw, All ports - 50Ω	12	15	18	mA

Available Options

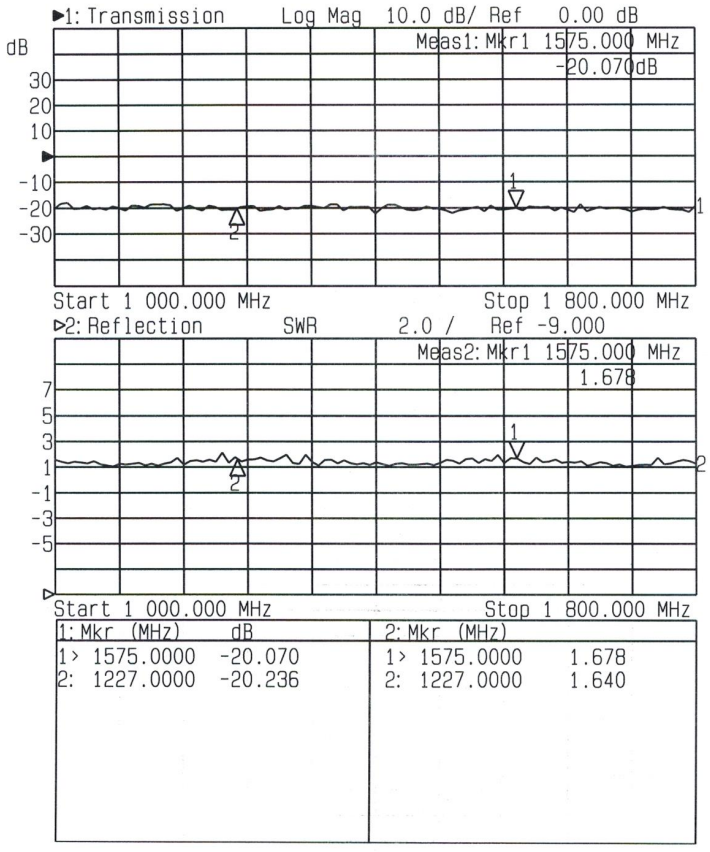
Connector Options	CONNECTOR STYLE
	Type N-female
	Type SMA-female
	Type TNC-female
	Type BNC-female

Part Number


VATTEN PDC - N
Product Type:
VATTEN: Mini Variable Attenuator (0-20dB)
DC Options:
PDC: Pass DC; DCB: DC Blocked
Connector Options (Type Female Standard):
N: N type: S: SMA; T: TNC; BNC: BNC

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