



DCB

DC Block

Technical Product Data



Features

- **Blocks DC voltage**
- **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 Insertion Loss** < 1.0dB typical

Description

The DCB GPS DC Block (GNSS DC Block) is a one input, one output device that is designed to block unwanted DC voltage anywhere in a system network. The DCB features a miniaturized housing to use when small form factors are required. 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 input and output will block DC from both the input and output.

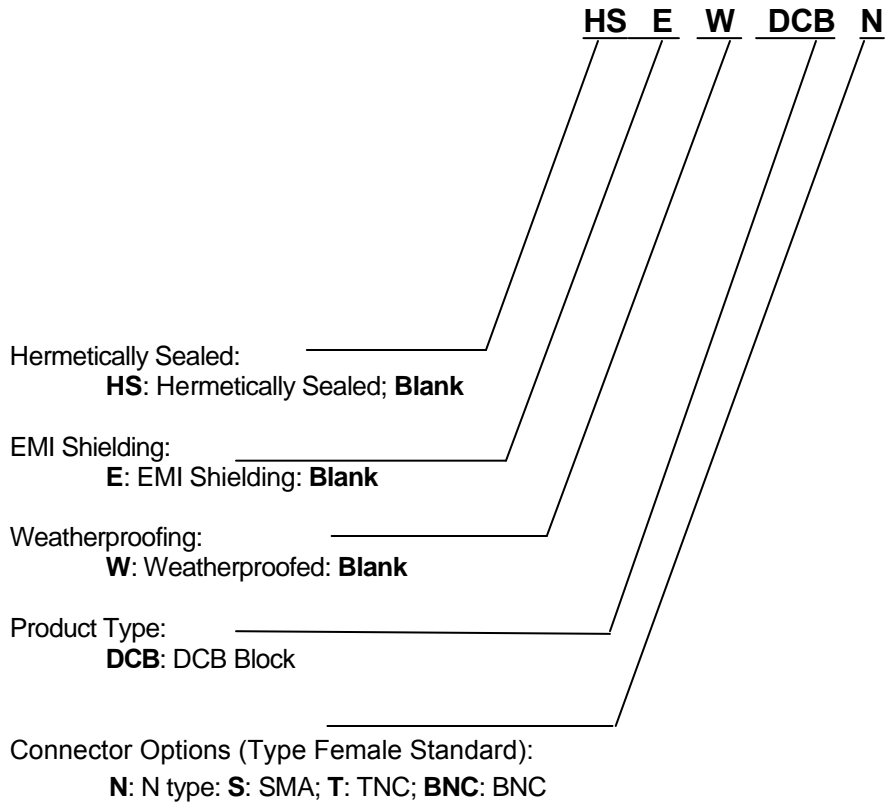
Electrical Specifications, $T_A = 25^{\circ}\text{C}$

Parameter	Conditions	Min	Typ	Max	Units
Freq. Range	Ant – J1	1.1		1.7	GHz
In/Out Imped.	Ant, J1		50		Ω
Insertion Loss	Ant – J1,	0.5	1.0	1.5	dB
Input SWR	J1 - 50Ω		1.5:1	2:1	-
Output SWR	Ant - 50Ω		1.5:1	2:1	-
Flatness	L1 – L2 ; Ant – J1		0.5	1	dB
Group delay Flatness	$\tau_{d,max} - \tau_{d,min}$; Ant – J1			1	ns

Available Options

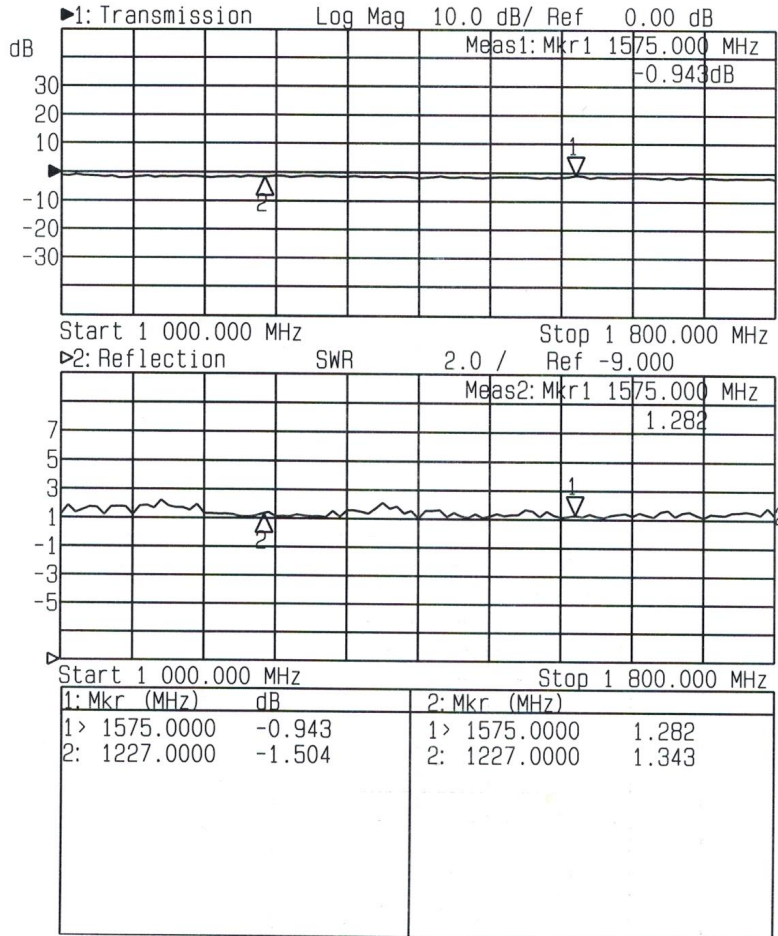
Pass/Block DC Options	
	Both Input/Antenna Port and Output are DC Blocked
RF Connector Options	
Connector Options	CONNECTOR STYLE
	Type N-female
	Type SMA-female
	Type TNC-female
	Type BNC-female

Part Number



Performance

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

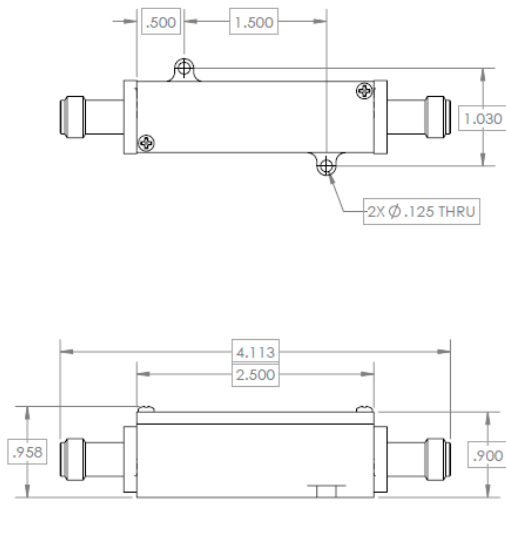


Mechanical

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 Serials, Rev. 1.000 18810104-AS-B011 Final Design - Signals for 250 Road Meter	
REV: B	08/17/15	Design By:	Proj Mgr:	Issue:	1.000
Character:		Scale:	Quantity / Unit Asy:	Material:	1.000
Size:		Unit:		See Note	1.000
Part Name:		Material:			
Draw Number:		Rev:	Sheet:	Part Name:	
ASSY, 1X1 MINI		B	B	1 OF 1	