



# *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.

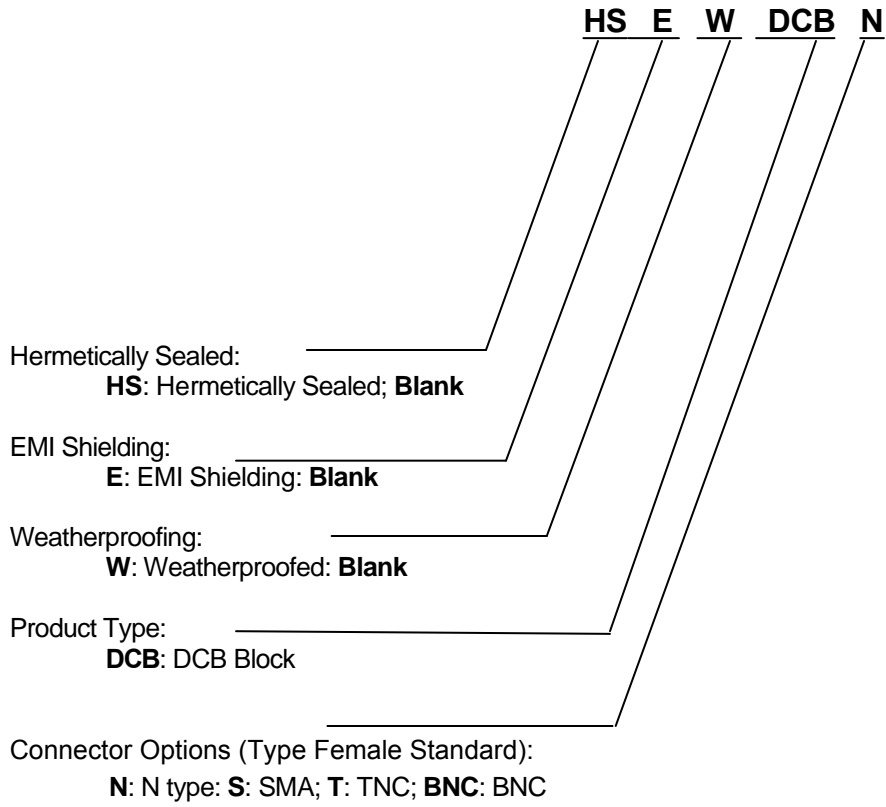
Electrical Specifications,  $T_A = 25^{\circ}\text{C}$

Parameter	Conditions	Min	Typ	Max	Units
Freq. Range	Ant – J1	1.1		1.7	GHz
In/Out Imped.	Ant, J1		50		$\Omega$
Insertion Loss	Ant – J1,	0.5	1.0	1.5	dB
Input SWR	J1 - $50\Omega$			1.5:1	-
Output SWR	Ant - $50\Omega$			1.5:1	-
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

Available Options

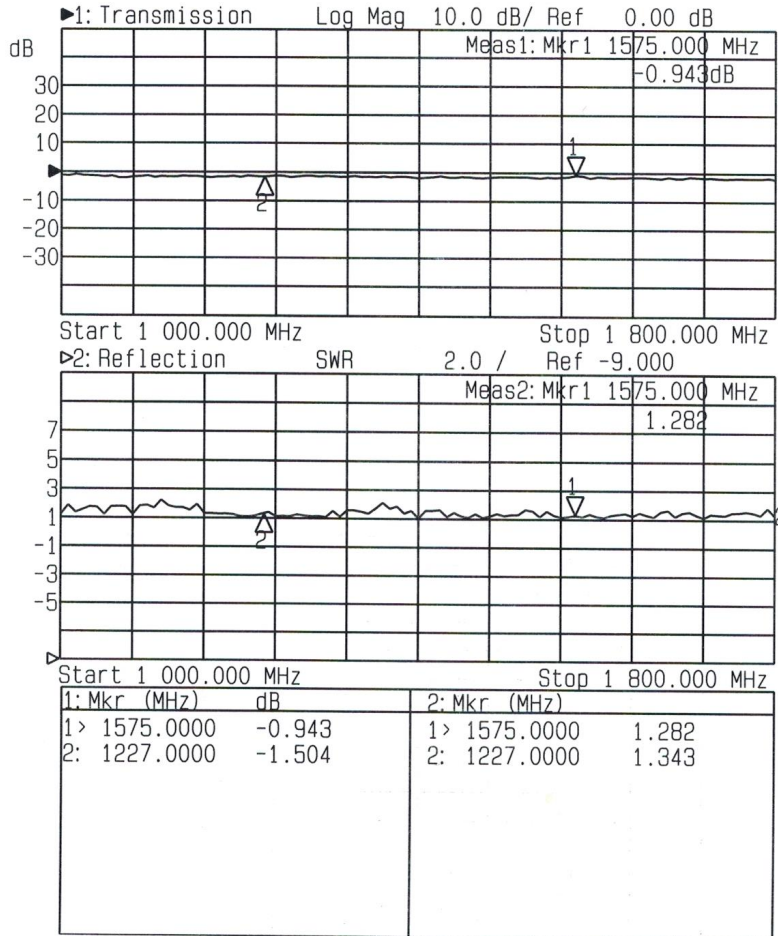
Pass/Block DC Options	
	Both Input/Antenna Port and Output are DC Blocked
RF Connector Options	
Connector Options	CONNECTOR STYLE
	Type N-female
	Type SMA-female
	Type TNC-female
	Type BNC-female

Part Number



# Performance

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

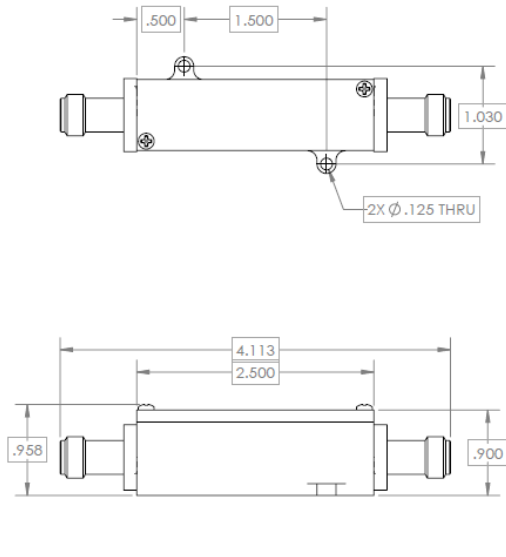


Mechanical

**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 Series, Rev. 1	
REV: B	08/17/15	Design No.	1000	1000	1000
Character:	Sub:	Proj No.	1000	1000	1000
Scale:	Quantity / Unit Adj:	Rel. To:	See Note	1000	1000
Part Age Protocol:	Material:	Part No.:	1000	1000	1000
Draw Number:	ASSY, 1X1 MINI	REV: B	SHEET 1 OF 1	1000	1000