

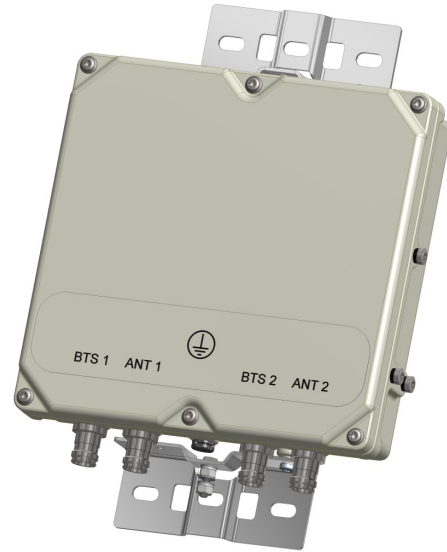
BSF0020F1V2-1

TWIN BANDSTOP 900MHZ INTERFERENCE MITIGATION FILTER

The BSF0020F1V2 is ideal for co-located 700, 850 and 900 networks. Utilising a 2.5MHz guardband the BSF0020F1V2 provides rejection of the 900 UL band while passing 700/850 UL and DL bands. Capable of being used in an outdoor environment the BSF0020F1V2 contains two identical bandstop filters, suitable for 2x2 MIMO configuration, offering excellent insertion loss, group delay and rejection.

FEATURES

- Passes full 700 and 850 bands
- Low insertion loss
- Rejection of 900MHz uplink
- DC/AISG pass
- Twin unit



TECHNICAL SPECIFICATIONS

BAND NAME	700 PATH	850 UPLINK PATH	850 DOWNLINK PATH
Passband	698 - 806MHz	814 - 845MHz	859 - 890MHz
Insertion loss	0.2dB typical, 0.3dB maximum	0.2dB typical, 0.3dB maximum	0.5dB typical, 1.5dB maximum
Return loss	24dB typical, 18dB minimum		
Group delay variation	2ns typical	3ns typical	270ns typical across 10MHz
Absolute group delay	8ns maximum	10ns maximum	300ns maximum
Maximum input power	100W (LTE/NR)	N/A	200W (3G/LTE/NR)
Group Delay Tracking	±5ns	±5ns	12ns± 5ns@869MHz 27ns± 5ns@880MHz 97ns± 5ns@888MHz 210ns± 30ns@890MHz
Rejection	60dB minimum @ 892.5 - 915MHz		

ELECTRICAL

Impedance	50Ohms
Intermodulation products	-160dBc maximum in UL Band (assuming 20MHz Signal), with 2 x 43dBm carriers -153dBc maximum with 2 x 43dBm

DC / AISG

Passband	0 - 13MHz
Insertion loss	0.3dB maximum
Return loss	15dB minimum
Input voltage range	± 33V
DC current rating	2A continuous, 4A peak
Compliance	3GPP TS 37.461

ENVIRONMENTAL

For further details of environmental compliance, please contact Kaelus.	
Temperature range	-20°C to +60°C -4°F to +140°F
Ingress protection	IP67
Altitude	2600m 8530ft
Lightning protection	RF port: ±5kA maximum (8/20us), IEC 61000-4-5 – Unit must be terminated with some lightning protection circuits.
MTBF	>1,000,000 hours
Compliance	ETSI EN 300 019 class 4.1H, RoHS, NEBS GR-487-CORE

MECHANICAL	
Dimensions H x D x W	269 x 277 x 80mm 10.60 x 10.90 x 3.15in (Excluding brackets and connectors)
Weight	6.0 kg 13.2 lbs
Finish	Powder coated, light grey (RAL7035)
Connectors	RF: 4.3-10 (F) x 4
Mounting	Optional pole/wall bracket supplied with two metal clamps 45-178mm diameter poles (See ordering information). The bracket also designed to fit specific customer frame

SHIPPING INFORMATION	
Feature	2 in / 2 out
Carton size	370 x 350 x 170mm
Gross weight (including packaging)	6.5kg

ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS
BSF0020F1V2-1	TWIN, 2 in / 2 out	DC/AISG PASS	4.3-10 (F)

ELECTRICAL BLOCK DIAGRAM

ANT1



BTS1

ANT2



BTS2

MECHANICAL BLOCK DIAGRAM

