

BSF0021F1V1-1

TWIN BANDSTOP 900MHZ FILTER

The BSF0021F1V1 is ideal for co-located 850 and 900 networks. Utilising a 2.5MHz guardband the BSF0021F1V1 provides rejection of the 850 band while passing 900 UL and DL bands. Capable of being used in an outdoor environment the BSF0021F1V1 contains two identical bandstop filters, suitable for 2x2 MIMO configuration, offering excellent insertion loss, group delay, EVM and rejection.

FEATURES

- Rejection of 850MHz downlink
- Passes full 900 band
- Notch filter structure
- DC/AISG pass
- Low insertion loss
- Outdoor and indoor configurations
- Twin unit



TECHNICAL SPECIFICATIONS

BAND NAME	900 UPLINK PATH	900 DOWNLINK PATH
Passband	890 - 915MHz	935 - 960MHz
Insertion loss	0.3dB typical, 1.0dB maximum	0.15dB typical, 0.2dB maximum
Return loss	20dB typical, 18dB minimum	
EVM	1% typical, 3% maximum	
Group delay variation	200ns maximum across 10MHz	
Absolute group delay	250ns maximum	
Rejection	60dB minimum @ 869 - 885MHz	

ELECTRICAL

Impedance	50Ohms
Intermodulation products	-153dBc maximum with 2x20W (IM3)
Maximum input power (Per Port)	200W

DC / AISG

Passband	0 – 3MHz
Insertion loss	0.3dB maximum
Return loss	15dB minimum
Input voltage range	± 33V
DC current rating	2A continuous, 4A peak
Compliance	3GPP TS 25.461

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, Outdoor unit
Lightning protection	RF port: ±5kA maximum (8/20us), IEC 61000-4-5 – Unit must terminated with some lightning protection circuits.
MTBF	>1,000,000 hours
Compliance	ETSI EN 300 019 class 4.1E, RoHS

MECHANICAL

Dimensions H x D x W	334x130x80mm 13.1 x 5.11 x 3.14in (Excluding brackets and connectors)
Weight	4.4kg 9.7lbs estimated
Finish	Powder coated, light grey (NCS 1502-R)
Connectors	RF: 4.3-10 (F) x 4
Mounting	Pole/wall bracket supplied with two metal clamps 45-178mm diameter poles

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
BSF0021F1V1-1	TWIN BANDSTOP FILTER, 890-960MHz, 60dB REJECTION @869-885MHz, DC PASS, 4.3-10(F)

ELECTRICAL BLOCK DIAGRAM

ANT1



BTS1

ANT2



BTS2

MECHANICAL BLOCK DIAGRAM

