

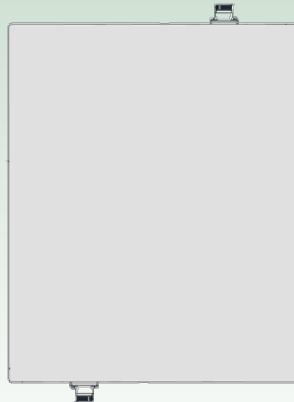
Bandpass Filter for 700MHz Public Safety Band

Model: 95-83L-03-M



DS039759-1A

7/25/2024



Need

Minimize interference to Public Safety 700MHz narrowband communications systems from nearby high power bands that interfere with BDA and DAS systems without sharp filtering.

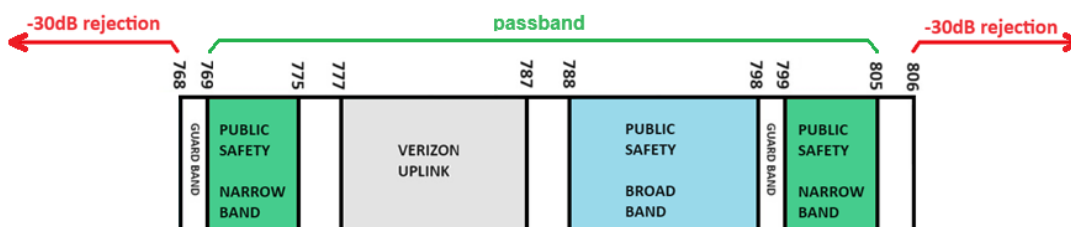
There are many cases where Public Safety DAS systems are seeing interference in the 700MHz from other nearby high power radio bands.

Solution

The outdoor application rated filter can be installed in-line to provide sharper filtering of the Public Safety 700MHz Uplink and Downlink.

How it Works and Benefits

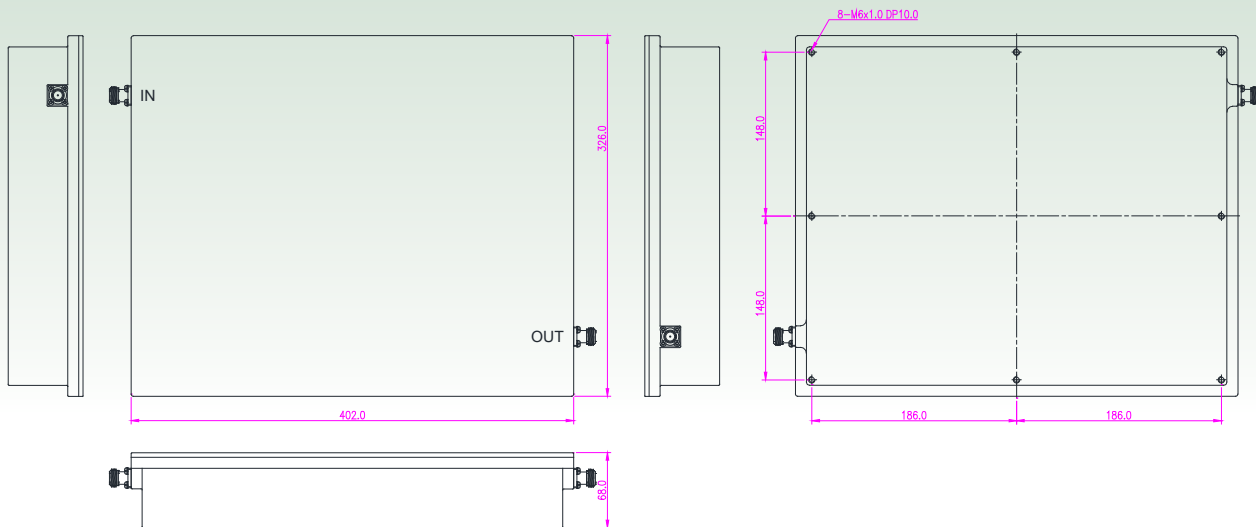
The outdoor application rated filter can be installed in-line BDA and DAS systems in the Donor and/or DAS lines. The filter passes the narrowband segment of the 700MHz Public Safety radio bands and will provide a minimum of 30dB rejection below 769MHz and above 805MHz. The filter is small and has low PIM characteristics.



Specifications

	Parameter	Specification
Electrical	Passband	769-805 MHz
	Insertion Loss (in passbands)	2.0 dB max
	Return Loss (in passbands)	19.0 dB min
	Out of Band Rejection	30dBc Min @DC-768MHz 30dBc Min @806-869MHz
	RF Power	50 W average
	PIMD (9th order)	150dBc Min @ 2x43dBm Input
	Impedance (all ports)	50 Ω
Mechanical	Size (filter housing)	15.9 x 12.8 x 2.7 (in) H x W x D 402 x 326 x 68 (mm) H x W x D
	RF Connectors	Input and Output ports: Type N-f
	Connector position	See mechanical outline drawing
	Mounting Points	See mechanical outline drawing
	Finish	Gray Color Powder Coating
Environmental	Temperature Range	-30 to +65°C
	Relative humidity	5 - 95%
	Barometric	55 KPa - 106KPa
	Lightning Protection (all ports)	3kA 10/250us, 8kA 8/20 us
	Enclosure rating	IP67
	RoHS	Compliant

Mechanical Outline



Performance Curves

Passband 769-805 MHz

Marker 1 (768 MHz): -36.1 dB

Marker 2 (769 MHz): -1.8 dB

Marker 3 (805 MHz): -1.8 dB

Marker 4 (806 MHz): -36.1 dB

