

# SM Bandpass Filters



Utilizing DLI's high permittivity, COG/NPO ceramics allow for small size, temperature stable performance over frequency and high reliability in environmentally challenging conditions. This series of bandpass filters was designed to span the popular 1.22-28 GHz frequency range. The compact size and surface mount attachment allow for low cost of manufacturing without sacrificing performance and repeatability. Designed for use on PCB 8-12 mils thick with a permittivity of 3.0-3.8.

## Features

- Small Size
- Fully Shielded Component
- Frequency Stable over Temperature
- Operating Temp: -55°C to +125°C
- Characteristic Impedance: 50Ω

## Specifications

Part Number	Center Frequency	Passband	Insertion Loss (@Fc)		VSWR 50Ω System	Rejection		Length Inches (mm)	Width Inches (mm)	Height Inches (mm)
			@ 25°C	-40°C to +85°C						
<b>B012MD5S</b>	1.227 GHz	1.22 to 1.23 GHz	3.5 dB	4.2 dB	2.0:1	dc to 0.925 GHz (30 dB)	1.45 to 2.5 GHz (35 dB)	0.670 (17.02)	0.600 (15.24)	0.100 (2.36)
<b>B016MD5S</b>	1.575 GHz	1.57 to 1.58 GHz	3.5 dB	4.2 dB	2.0:1	dc to 1.175 GHz (40 dB)	1.875 to 3.0 GHz (40 dB)	0.670 (17.02)	0.600 (15.24)	0.100 (2.36)
<b>B028RF2S</b>	3 GHz	2 to 4 GHz	2.5 dB	3.0 dB	1.63:1	dc to 1.25 GHz (40 dB)	4.85 to 6 GHz (40 dB)	0.450 (11.43)	0.400 (10.16)	0.113 (2.87)
<b>B033ND5S</b>	3.3 GHz	3.1 to 3.5 GHz	2.0 dB	3.2 dB	2.0:1	dc to 2.6 GHz (30 dB)	4 to 6 GHz (40 dB)	0.393 (9.98)	0.353 (8.97)	0.128 (3.25)
<b>B057MD7S</b>	5.7 GHz	5.5 to 6.1 GHz	2.3 dB	2.8 dB	1.67:1	dc to 4.65 GHz (34 dB)	6.85 to 16 GHz (30 dB)	0.475 (12.1)	0.275 (7.00)	0.103 (2.62)
<b>B056RC4S</b>	6 GHz	4 to 8 GHz	3.0 dB	3.5 dB	1.5:1	dc to 3 GHz (40 dB)	9.5 to 12 GHz (40 dB)	0.450 (11.43)	0.230 (5.84)	0.100 (2.54)
<b>B060NC5S</b>	6 GHz	5.5 to 6.5 GHz	2.0 dB	3.0 dB	1.29:1	dc to 4.9 GHz (30 dB)	7.1 to 14 GHz (40 dB)	0.500 (12.7)	0.200 (5.08)	0.088 (2.24)
<b>B080MB5S</b>	8 GHz	7.5 to 8.5 GHz	2.0 dB	3.0 dB	1.29:1	dc to 6.8 GHz (40 dB)	9.2 to 18 GHz (40 dB)	0.500 (12.7)	0.180 (4.57)	0.100 (2.54)
<b>B096QC2S</b>	10 GHz	8 to 12 GHz	2.5 dB	3.0 dB	2.0:1	dc to 6 GHz (40 dB)	14 to 18 GHz (40 dB)	0.400 (10.86)	0.180 (4.57)	0.100 (2.54)
<b>B120MB1S</b>	12 GHz	11.5 to 12.5 GHz	2.0 dB	3.0 dB	1.29:1	dc to 10.6 GHz (40 dB)	13.2 to 20 GHz (40 dB)	0.525 (13.34)	0.225 (5.72)	0.090 (2.27)
<b>B148QF0S</b>	15 GHz	12 to 18 GHz	3.6 dB	4.2 dB	1.63:1	dc to 7.6 GHz (40 dB)	22.5 to 25.0 GHz (30 dB)	0.550 (13.97)	0.150 (3.81)	0.098 (2.49)
<b>B161LA0S</b>	16 GHz	15.5 to 16.5 GHz	4.0 dB	6.0 dB	1.67:1	dc to 14.7 GHz (40 dB)	17.2 to 22 GHz (40 dB)	0.695 (17.65)	0.250 (6.35)	0.093 (2.36)
<b>B280LB0S</b>	28 GHz	27 to 29 GHz	1.5 dB	2.0 dB	2.0:1	dc to 25.5 GHz (30 dB)	30.2 to 35 GHz (30 dB)	0.350 (8.89)	0.120 (3.05)	0.098 (2.49)
<b>B280LA0S</b>	28 GHz	27.5 to 28.5 GHz	4.0 dB	4.5 dB	2.0:1	dc to 26.1 GHz (30 dB)	30 to 37 GHz (30 dB)	0.550 (14.00)	0.140 (3.56)	0.083 (2.11)
<b>B424MEZ5</b>	42.5 GHz	39.7 to 45.3 GHz	1.5 dB	2 dB	2.0:1	dc to 37 GHz(30dB)	47.5 to 60 GHz (30dB)	0.236 (6.00)	0.08 (2.03)	0.065 (1.65)

