Bandpass Filter · 120–180 MHz

Compare typical performance at the measurement frequencies listed in the table. The recommended PCB land pattern has its own dimensions, and the filter supports reflow soldering at 190 °C.

RF Performance

Parameter	Value
Passband	120–180 MHz
Passband Insertion Loss [1]	≤ 3.0 dB
Passband Ripple [1]	≤ 1.0 dB
Out-of-Band Rejection · DC–90 MHz	≥ 55 dBc
Out-of-Band Rejection · 220–1500 MHz	≥ 55 dBc
VSWR [1]	≤ 1.6

[1] 120–180 MHz

Design Ratings

Guaranteed by design

Parameter	Value
Power Handling	2 W
Operating Temperature	−40...+85 °C
Storage Temperature	−55...+85 °C

Typical measured response

Frequency	S11 VSWR	S22 VSWR	S12 loss (dB)	S12 delay (ns)
90 MHz	106.51	133.61	-61.27	643.73
99 MHz	54.67	56.25	-42.92	8.56
109 MHz	14.29	13.1	-15.12	36.94
118 MHz	1.83	1.57	-2.82	37.2
127 MHz	1.29	1.28	-1.47	25.09
136 MHz	1.23	1.23	-1.24	21.15
146 MHz	1.11	1.11	-1.17	19.47
155 MHz	1.23	1.21	-1.26	19.31
164 MHz	1.32	1.34	-1.45	19.82
174 MHz	1.23	1.31	-1.73	23.18
183 MHz	1.27	1.26	-2.45	31.12

Typical measured response

Frequency	S11 VSWR	S22 VSWR	S12 loss (dB)	S12 delay (ns)
192 MHz	4.22	4.07	-8.85	55.84
201 MHz	13.87	16.42	-27.17	16.72
211 MHz	27.57	37.1	-50.11	2.76
220 MHz	40.4	54.42	-59.8	33.55

Mechanical Specifications

Parameter	Value
RF Interface	Surface mount
RF Impedance	50 Ω
Housing dimensions	20 × 9 × 5 mm (Dimensional tolerance ±0.2 mm)

Installation and handling

Clean the product surface without immersing the filter in cleaning liquid. Supports reflow soldering at 190 °C.

Document notice

Specifications are subject to revision. Before design release, confirm the current document revision and product-specific requirements with LCRF. The approved quotation and order documentation define the supplied configuration.