Bandpass Filter · 140–220 MHz

Allow for the 20 × 9 mm body footprint and the supported 190 °C reflow temperature. Use the typical response table to check performance at the listed measurement frequencies.

RF Performance

Parameter	Value
Passband	140–220 MHz
Passband Insertion Loss [1]	≤ 3.0 dB
Passband Ripple [1]	≤ 1.0 dB
Out-of-Band Rejection · DC–108 MHz	≥ 40 dB
Out-of-Band Rejection · 260–1000 MHz	≥ 40 dB
VSWR [1]	≤ 1.6

[1] 140–220 MHz

Design Ratings

Guaranteed by design

Parameter	Value
Power Handling	2 W
Operating Temperature	−40…+70 °C
Storage Temperature	−55…+85 °C

Typical measured response

Frequency	S11 VSWR	S22 VSWR	S12 loss (dB)	S12 delay (ns)
108 MHz	57.35	54.1	-40.65	9.17
119 MHz	28.92	26.49	-30.66	25.64
130 MHz	8.39	7.93	-11.65	38.73
141 MHz	1.45	1.35	-2.09	30.27
151 MHz	1.35	1.28	-1.25	19.12
162 MHz	1.29	1.31	-1.13	15.5
173 MHz	1.27	1.2	-1.2	14.13
184 MHz	1.28	1.11	-1.29	13.81
195 MHz	1.22	1.1	-1.32	14.36
206 MHz	1.23	1.21	-1.37	15.76
217 MHz	1.26	1.26	-1.58	19.02

Typical measured response

Frequency	S11 VSWR	S22 VSWR	S12 loss (dB)	S12 delay (ns)
227 MHz	1.41	1.43	-2.52	27.04
238 MHz	4.74	4.95	-11.22	39.74
249 MHz	15.21	15.41	-26.44	33.55
260 MHz	27.46	27.24	-45.59	11.87

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.