Bandpass Filter · 1775–1825 MHz

Allow for the 20 × 9 mm body footprint and the supported 190 °C reflow temperature. The typical response table gives S12 loss, rejection and delay at the listed measurement frequencies.

RF Performance

Parameter	Value
Passband	1775–1825 MHz
Passband Insertion Loss [1]	≤ 5.5 dB
Passband Ripple [1]	≤ 1.0 dB
Out-of-Band Rejection · DC–1700 MHz	≥ 30 dB
Out-of-Band Rejection · 1900–5000 MHz	≥ 30 dB
VSWR [1]	≤ 1.60

[1] 1775–1825 MHz

Design Ratings

Guaranteed by design

Parameter	Value
Power Handling	1 W
Operating Temperature	−40…+85 °C
Storage Temperature	−55…+85 °C

Typical measured response

Frequency	S11 VSWR	S22 VSWR	S12 loss (dB)	S12 rejection (dB)	S12 delay (ns)
1700 MHz	23.07	35.31	-35.45	-35.45	6.25
1714 MHz	14.72	19.96	-26.52	-26.52	5.85
1729 MHz	5.99	7.7	-15.55	-15.55	11.12
1743 MHz	1.51	1.91	-6.49	-6.49	17.98
1757 MHz	1.43	1.46	-4.32	-4.32	13.8
1771 MHz	1.25	1.27	-3.79	-3.79	12.1
1786 MHz	1.45	1.58	-3.73	-3.73	11.13
1800 MHz	1.2	1.46	-3.82	-3.82	11.29
1814 MHz	1.18	1.36	-4	-4	12.02
1829 MHz	1.09	1.18	-4.58	-4.58	14.07
1843 MHz	1.76	1.34	-7.04	-7.04	17.03

Typical measured response

Frequency	S11 VSWR	S22 VSWR	S12 loss (dB)	S12 rejection (dB)	S12 delay (ns)
1857 MHz	4.67	4.1	-15.24	-15.24	11.95
1871 MHz	9.26	9.3	-25.27	-25.27	7.05
1886 MHz	14.18	16.92	-34.21	-34.21	6.29
1900 MHz	18.78	26.39	-40.11	-40.11	6.95

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.