Bandpass Filter · 1500–1600 MHz · SMA-K

Use the 37.4 × 9 mm hole-center spacing and allow mating space for the opposed SMA-K connectors. The typical response table gives S12 loss and rejection in separate columns.

RF Performance

Parameter	Value
Passband	1500–1600 MHz
Passband Insertion Loss [1]	≤ 4.0 dB
Passband Ripple [1]	≤ 1.0 dB
Out-of-Band Rejection · DC–1400 MHz	≥ 40 dB
Out-of-Band Rejection · 1700–4500 MHz	≥ 40 dB
VSWR [1]	≤ 1.50

[1] 1500–1600 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 rejection (dB)	S12 delay (ns)
1400 MHz	43	28.35	-61.18	-61.18	-11.38
1421 MHz	27.6	15.53	-43.56	-43.56	-1.44
1443 MHz	13.35	6.1	-21.92	-21.92	10.24
1464 MHz	4.6	2.05	-8.62	-8.62	13.6
1486 MHz	1.58	1.4	-3.63	-3.63	11.34
1507 MHz	1.36	1.31	-2.79	-2.79	8.82
1529 MHz	1.24	1.15	-2.52	-2.52	7.89
1550 MHz	1.21	1.13	-2.51	-2.51	7.59
1571 MHz	1.24	1.19	-2.69	-2.69	7.72
1593 MHz	1.26	1.23	-3.09	-3.09	8.47
1614 MHz	1.33	1.27	-3.98	-3.98	10.06

Typical measured response

Frequency	S11 VSWR	S22 VSWR	S12 loss (dB)	S12 rejection (dB)	S12 delay (ns)
1636 MHz	1.44	1.68	-7.02	-7.02	12.8
1657 MHz	3.05	3.87	-15.93	-15.93	12.16
1679 MHz	7.45	8.79	-33.23	-33.23	4.95
1700 MHz	14.26	15.52	-52.63	-52.63	-3.68

Mechanical Specifications

Parameter	Value
RF Interface	SMA-K
RF Impedance	50 Ω
Surface Finish	Silver plating
Housing dimensions	40.4 × 12 × 10 mm (Excluding connector protrusion)
Mounting holes	4 × M2 mounting threads (Hole-center spacing 37.4 × 9 mm)
Connector material	Stainless steel
Housing material	H62 brass

Installation and handling

Clean the product surface without immersing the filter in cleaning liquid. Consult before ordering if the temperature of the complete unit will exceed 125 °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.