Five-path bandpass filter bank

The narrower passbands lie within the wider ones. Maximum passband ripple is 0.5 dB on CH1 through CH4 and 0.6 dB on CH5.

Connect each independent path through opposing round microstrip pins bearing the same channel mark.

RF Performance

Parameter	Value
Passband CH1	67.5–72.5 MHz
Passband CH2	65–75 MHz
Passband CH3	60–80 MHz
Passband CH4	50–90 MHz
Passband CH5	40–100 MHz
Passband Insertion Loss	≤ 5 dB
Passband ripple CH1–CH4	≤ 0.5 dB
Passband ripple CH5	≤ 0.6 dB
VSWR	≤ 1.5
Bandwidth at −40 dB CH1	≤ 23 MHz
Bandwidth at −40 dB CH2	≤ 30 MHz
Bandwidth at −40 dB CH3	≤ 50 MHz
Bandwidth at −40 dB CH4	≤ 74 MHz
Bandwidth at −40 dB CH5	≤ 98 MHz
Out-of-band rejection CH1	≥ 40 dB (DC–58.5 MHz)
Out-of-band rejection CH1	≥ 40 dB (81.5–140 MHz)
Out-of-band rejection CH2	≥ 40 dB (DC–55 MHz)
Out-of-band rejection CH2	≥ 40 dB (85–140 MHz)
Out-of-band rejection CH3	≥ 40 dB (DC–45 MHz)
Out-of-band rejection CH3	≥ 40 dB (95–140 MHz)
Out-of-band rejection CH4	≥ 40 dB (DC–33 MHz)
Out-of-band rejection CH4	≥ 40 dB (107–140 MHz)
Out-of-band rejection CH5	≥ 40 dB (DC–21 MHz)
Out-of-band rejection CH5	≥ 40 dB (119–140 MHz)
Out-of-band rejection CH1–CH5	≥ 45 dBc (140–200 MHz)

Temperature and power

Guaranteed by design

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

RF path connections

Parameter	Value
Independent RF paths	5
RF terminals	10
CH1 [1]	CH1
CH2 [1]	CH2
CH3 [1]	CH3
CH4 [1]	CH4
CH5 [1]	CH5

[1] One pair of opposing RF pins

Mechanical Specifications

Parameter	Value
RF Interface	Ø0.38 mm round microstrip pins
RF Impedance	50 Ω
Surface finish	Silver plated
Housing material	6061 aluminum
Housing dimensions	25 × 49 × 7 mm
Pin spacing on the same side	9.5 mm
Mounting holes	4 × M1.6 (Thread depth 4 mm)
Mounting hole-center spacing	22.5 × 46.5 mm

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.