Lowpass Filter · DC–140 MHz

RF Interface SMA-K · 50 Ω · Package Dimensions 30 × 12 × 10 mm

RF Performance

Parameter	Value
Passband	DC–140 MHz
Passband Insertion Loss [1]	≤1 dB
Stopband Rejection [2]	≥55 dB
Stopband Rejection [3]	≥65 dB
VSWR [1]	≤1.5:1

[1] DC–140 MHz
[2] 210–300 MHz
[3] 300–600 MHz

Design Ratings

Parameter	Value
Operating Temperature	–40...+85 °C (Guaranteed by design)

Typical measured response

Frequency (MHz)	S11 VSWR	S22 VSWR	S12 loss (dB)	S12 delay (ns)
0.01	1.09	1.09	-0.21	6.57
20	1.12	1.12	-0.11	6.82
40	1.16	1.17	-0.19	6.94
60	1.11	1.11	-0.24	7.44
80	1.08	1.08	-0.29	8
100	1.15	1.13	-0.39	8.94
120	1.12	1.12	-0.53	10.69
140	1.11	1.11	-0.87	15.67
160	10.25	9.03	-8.41	18.27
180	54.26	40.21	-28.23	6.68
200	116.67	73.26	-49.26	2.35
220	225.8	123.05	-67.79	-22.01
240	266.96	183.23	-62.12	1.96
260	288.55	231.02	-64.35	1.7

Typical measured response

Frequency (MHz)	S11 VSWR	S22 VSWR	S12 loss (dB)	S12 delay (ns)
280	556.67	330.37	-66.98	1.35

Mechanical Specifications

Parameter	Value
Power Handling	2 W
Package Dimensions	30 × 12 × 10 mm (Excluding connector protrusion)
RF Impedance	50 Ω
RF Interface	SMA-K (One connector at each end of the housing)
Surface Finish	Silver Plated
Connector Material	Stainless steel
Housing Material	H62
Mounting holes	4 × M2 mounting threads (Hole-center spacing 27 × 9 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.