

Interdigital Band-Pass Filter for the 24 GHz Band

DESCRIPTION

- The BPF 24G/7 is a 7-resonator, interdigital band-pass filter for multichannel systems in the 24 GHz band.
- Using interdigital principles the following features are obtained at the same time:
 - Wide Pass Range
 - Low insertion loss and ripple inside pass range
 - Steep slopes immediately outside pass range
 - Heavy attenuation outside the pass range.
- The BPF 24G/7 housing is made of silvered brass. Careful design and choice of materials ensure a long lifetime and reliable operation over a wide temperature range.
- The filter can be delivered with centre frequency between 20 and 25 GHz. The specifications and the curves below refer to a filter with 1 GHz port width, but interdigital filters with other port widths and filter characteristics may be quoted on request.



SPECIFICATIONS

Electrical	
Model	BPF 24G/7
Filter Type	Interdigital band-pass filter
Frequency	To be stated within 20 and 25 GHz
Max. Input Power	10 W
Pass Range Width	1 GHz
Impedance	50 Ω
Reject Attenuation	+/- 1 GHz rel. fc: approx. 30 dB +/- 2 GHz rel. fc: approx. 60 dB > 70 dB, typ. > 75 +/- 80 dB
VSWR	< 1.5:1

Mechanical	
Connection(s)	SMA(f)
Dimensions	65 x 6.8 x approx. 18 mm incl. conn.
Weight	0.06 kg / 0.13 lb

Environmental	
Operating Temperature Range	-30°C to +60°C
Frequency Stability	8 ppm/° C (approx.)

ORDERING

Model	Product No.
BPF 24G/7	20000801

DIAGRAM

TYPICAL RESPONSIVE CURVES

