BPF 10G/9

Interdigital Band-Pass Filter for the 10 GHz Band



DESCRIPTION:

- ★ The BPF 10G/9 is a 9-resonator, interdigital band-pass filter for multichannel systems in the 10 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 10G/9 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 9.5 GHz and 11.5 GHz. The specifications and the curves below refer to a filter with 500 MHz port width, but interdigital filters with other port widths and filter characteristics may be quoted on request.



SPECIFICATIONS:

ELECTRICAL	
FILTER TYPE	Interdigital band-pass filter
CENTRE FREQUENCY	To be stated within 9.5 and 11.5 GHz
MAX. INPUT POWER	10 watt
PASS RANGE WIDTH	500 MHz
INSERTION LOSS	≤1.0 dB typ.
ATTENUATION AROUND PASSBAND	± 400 MHz rel. f _c : approx. 30 dB ± 500 MHz rel. f _c : approx. 60 dB
ATTENUATION OUTSIDE PASS-RANGE	> 70 dB, typ. > 75–80 dB
IMPEDANCE	Nom. 50 Ω
SWR	≤1.5
MECHANICAL	
TEMP. RANGE	-30° C i +60° C
FREQ. STABILITY	Approx. 8 ppm/° C
CONNECTORS	SMA-female
DIMENSIONS (L x W x H)	104 x 10 x approx. 20 mm incl. conn.
WEIGHT	Approx. 100 g

