

BPF 1800/9

Interdigital Band-Pass Filter for the 1800 MHz Band



DESCRIPTION:

- ★ The BPF 1800/9 is a 9-resonator, interdigital band-pass filter for multichannel systems in the 1800 MHz 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 1800/9 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 1740 and 1840 MHz. The specifications and the curves below refer to a filter with 60 MHz port width, but interdigital filters with other port widths and filter characteristics may be quoted on request.

SPECIFICATIONS:

| ELECTRICAL | |
|---|--|
| MODEL | BPF 1800/9 |
| FILTER TYPE | Interdigital band-pass filter |
| CENTRE FREQUENCY | To be stated within 1740-1840 MHz |
| MAX. INPUT POWER | 100 watts |
| PASS RANGE WIDTH | 60 MHz (others on request) |
| INSERTION LOSS | ≤ 1.0 dB, typ. 0.9 dB |
| ATTENUATION AROUND PASSBAND | ± 50 MHz rel. f_c : > 30 dB ± 80 MHz rel. f_c : > 80 dB |
| ATTENUATION OUTSIDE PASS-RANGE, 0-2 GHz | > 70 dB, typ. > 100 dB (see curves) |
| IMPEDANCE | Nom. 50 Ω |
| SWR | ≤ 1.5 |
| MECHANICAL | |
| TEMP. RANGE | -30° C → +60° C |
| FREQ. STABILITY | Approx. 8 ppm/° C |
| CONNECTORS | N-female or 7/16-female |
| DIMENSIONS (L x W x H) | 360 x 75 x 32 mm |
| WEIGHT | Approx. 2.2 kg |



TYPICAL RESPONSE CURVES :

