

# LP 175

Low-Pass Filter for the 160 MHz Band



## DESCRIPTION:

- ★ The LP 175 is a low-pass filter, which passes all signals in or below the 2 m-band (138-175 MHz), and rejects signals above this range
- ★ The LP 175 is used to prevent RFI (Radio Frequency Interference) caused by excessive harmonic-generation from transmitters operating in the 2 m band. By rejection, the filter reduces the amplitude of the harmonics and prevents them from being radiated by the antenna.
- ★ The LP 175 has a very sharp rolloff between the passband and the stopband while at the same time keeping a low ripple in the passband.
- ★ The use of extremely high-Q resonant circuits ensures, that all of the attenuation is due to reflection and not dissipation, resulting in extraordinary low insertion loss and high power-handling capability.
- ★ The filter is normally used in connection with base station transmitters, but as it is mechanically very ruggedly designed, it is also perfectly suited for mobile and marine applications as well.
- ★ Materials used are brass and passivated steel, and the filter is black vinyl coated to prevent corrosion.



## SPECIFICATIONS:

ELECTRICAL	
MODEL	LP 175
APPLICATION	Low-pass filter for the 2 m band
FREQUENCY	Pass band: 0- 175 MHz (nominal): 138- 175 MHz Stop band: 300-1500 MHz
MAX. INPUT POWER	150 watts
INSERTION LOSS (PASS BAND)	≤ 0.5 dB
1 dB CUT-OFF FREQUENCY	> 180 MHz
ATTENUATION (STOP BAND)	> 70 dB
ATTENUATION 2. HARMON.	> 70 dB
ATTENUATION 3. HARMON.	> 90 dB
ATTENUATION 4. HARMON.	> 90 dB
ATTENUATION 5. HARMON.	> 80 dB
MECHANICAL	
TEMPERATURE RANGE	-30° C → +60° C
CONNECTORS	N-female
DIMENSIONS (L x W x H)	155 x 72 x 52 mm
WEIGHT	Approx. 410 g

## TYPICAL RESPONSE CURVES:

