

# 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 pass band and the stop band while at the same time keeping a low ripple in the pass band.
- > 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.
- Materials used are brass and passivated steel and the filter is coated with black vinyl to prevent corrosion.



### **SPECIFICATIONS**

Electrical	ctrical	
Model	LP 175	
Frequency	Pass band: 0 - 175 MHz (nominal): 138 - 175 MHz	
Max. Input Power	150 W	
Pass Band Insertion Loss	0.5 dB	
Attenuation 270 - 320 MHz	> 50 dB	
Attenuation 321 - 360 MHz	> 70 dB	
Attenuation 361 - 800 MHz	> 80 dB	
Attenuation 801 - 1100 MHz	> 60 dB	
Application	Low-pass filter for the 2 m band	
1 dB Cut-Off Frequency	> 180 MHz	
VSWR	< 1.5:1	

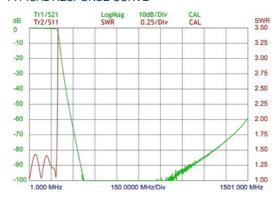
Mechanical	chanical	
Connection(s)	N(f)	
Dimensions	155 x 72 x 52 mm / 6.1 x 2.8 x 2.0 in.	
Weight	Approx. 0.41 kg / 0.90 lb.	

Environmental	
Operating temperature range	-30 °C to +60 °C

# **ORDERING**

Model	Product No.
LP 175	200001274

### TYPICAL RESPONSE CURVE



### MOUNTING DETAILS

