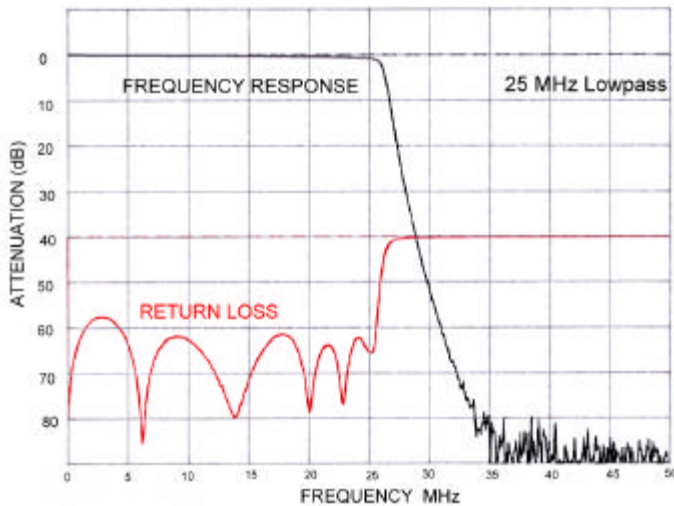


## HF BAND HIGH-POWER RF LOWPASS

These High-Power High Performance Lowpass Filters were designed for Mobile and Fixed base High-frequency (HF) Radio Transmitters in the 100-to-10-metre wavelength Band. Much of the HF band (3 MHz to 30 MHz) is allocated to mobile and fixed voice communication services that require reduction in harmonic content from their transmitters. International (shortwave radio) broadcasting is also conducted in the HF band and has similar harmonic reduction requirements.



These rugged high performance high power Lowpass Filters are made with cutoff frequencies of 25MHz or 30MHz. Available in 50, 200 and 500 watt versions. The rapid cutoff and high attenuation these filters provide make them useful in many applications. Suitable for harmonic reduction and bandwidth limiting on transmitters up to 500 watts. The special Impedance invariant design makes them compatible with all Antenna tuners. Meets applicable requirements of MIL-STD-810E and has been used on many Military HF Radios.

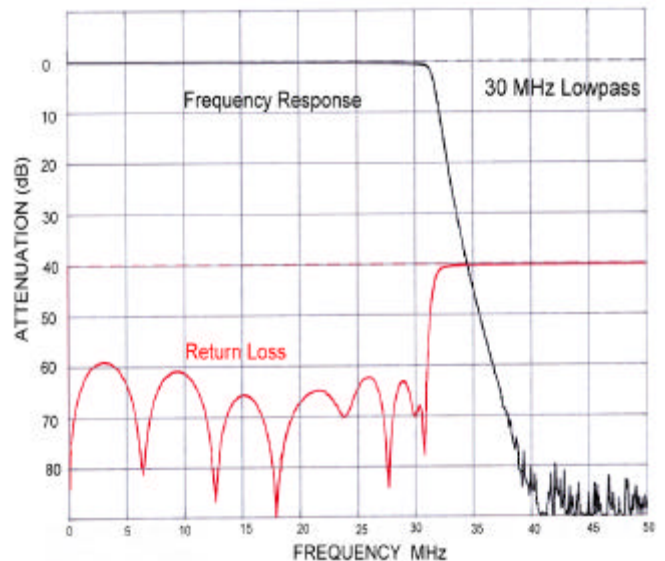


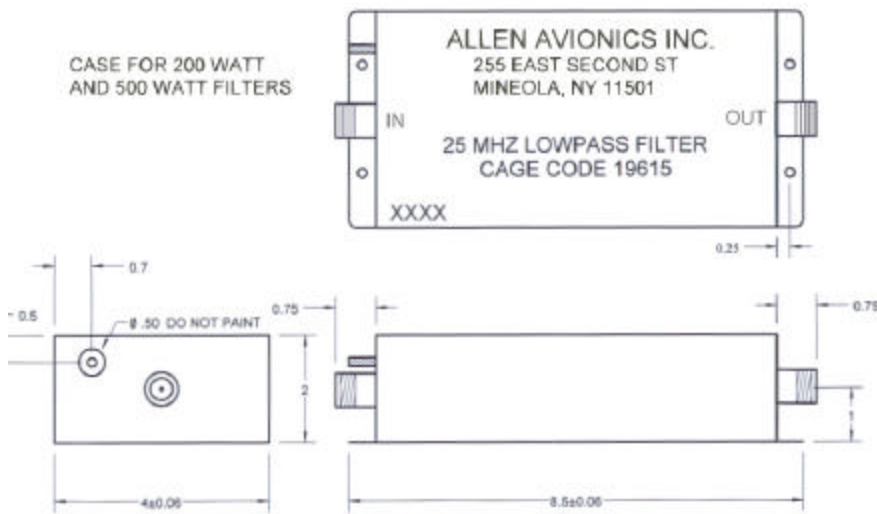
### SPECIFICATIONS 25MHz LOWPASS

- Passband ----- 1.5 MHz – 25 MHz
- Return Loss ----- 16dB 1.5- 5 MHz  
20dB 5.0-25 MHz
- Passband insertion loss--- 0.5 dB 1.5-22 MHz  
1.0 dB 22-25 MHz
- stopband----- 40dB at 30 MHz  
60 dB 35-90 MHz
- Ultimate Stopband----- 80dB to 250 MHz
- Impedance ----- 50 Ohms
- Power handling ----- 50, 200 or 500 Watts
- Mounting-----flanges on all units

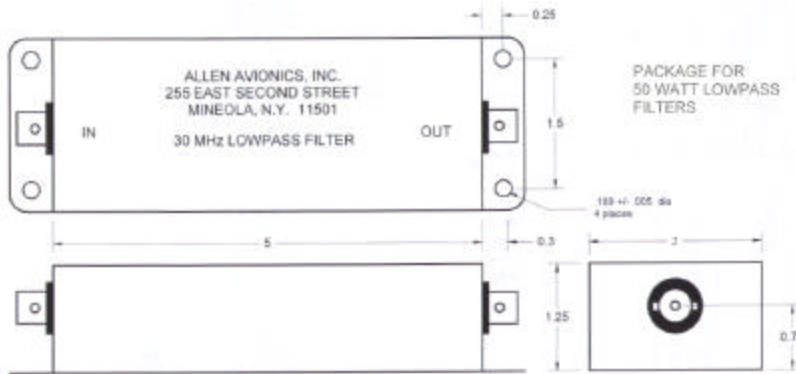
### SPECIFICATIONS 30MHz LOWPASS

- Passband ----- 1.5 MHz – 30 MHz
- Return Loss ----- 16dB 1.5- 5 MHz  
20dB 5.0-30 MHz
- Passband insertion loss--- 0.5 dB 1.5-22 MHz  
1.0 dB 22-30 MHz
- stopband----- 40dB at 36 MHz  
60 dB 40-90 MHz
- Ultimate Stopband----- 80dB to 250 MHz
- Impedance ----- 50 Ohms
- Power handling ----- 50, 200 or 500 Watts
- Mounting-----flanges on all units





Cans are Cold Rolled Steel  
Electro Tin plated or Hot Tin dipped.



- SOLAR RADIATION: METHOD 505.3, PROCEDURE 1, HOT-DRY TEMPERATURE CONDITIONS
- RAIN: METHOD 506.3, PROCEDURE I
- HUMIDITY: METHOD 507.3, PROCEDURE 111.
- FUNGUS: METHOD 508.4.
- SALT FOG: METHOD 509 3, PROCEDURE I
- SAND AND DUST: METHOD 510 3 PROCEDURE I AND 11
- LEAKAGE (IMMERSION): METHOD 512.3, PROCEDURE 1, 2 HOURS AT 1.0 METER
- VIBRATION: METHOD 514 4, CATEGORIES 1, 3 AND 8 (TABLE 514 4-AIII)
- SHOCK: METHOD 516.4, PROCEDURE 1, V, AND VI.
- ICING/FREEZING RAIN: METHOD 521.1.

### ORDERING INFORMATION

**SERIES**    **FREQUENCY**    **POWER**    **CONNECTOR**  
**HFHP**    **25.0 OR 30.0 MHz**    **50, 200, 500 WATTS**    **N, BNC, UHF**

**HFHP-XX.X-XXX-X**

SAMPLE  
SAMPLE

HFHP-30.0-50-N  
 HFHP-25.0-500-UHF

30 MHz LP 50 WATTS TYPE N CONNECTOR  
 25 MHz LP 500 WATTS UHF CONNECTOR

# ALLEN AVIONICS, INC.

These filters are normally supplied with N Female connectors but can be ordered with BNC connectors and SO-239 UHF connectors.

All the filters are supplied in Hermitically sealed Metal cases designed for tough applications.

They resist shock, vibration, high and low temperature extremes, salt, sand, dust and leakage.

The filters were designed to meet applicable requirements of MIL-STD-810E (Environmental test Methods) and MIL-F-14072D

(Finishes for ground based Equipment) that are listed below.

#### ENVIRONMENTAL

ALTITUDE: METHOD 500 3, PROCEDURE 1, 11, AND III TEST ALTITUDE FOR PROCEDURE III IS 4,570 METERS AT 57 2 kPa.

HIGH TEMPERATURE: METHOD 501-3, PROCEDURE I TO +70 C NON-OPERATING, AND PROCEDURE 11 TO +60°C OPERATING.

LOW TEMPERATURE: METHOD 502.3, PROCEDURE I TO -51 C NON-OPERATING, AND PROCEDURE 11 TO -40°C OPERATING.

TEMPERATURE SHOCK: METHOD 503.3, LOW TEMPERATURE -51 °C AND HIGH TEMP. +48°C.