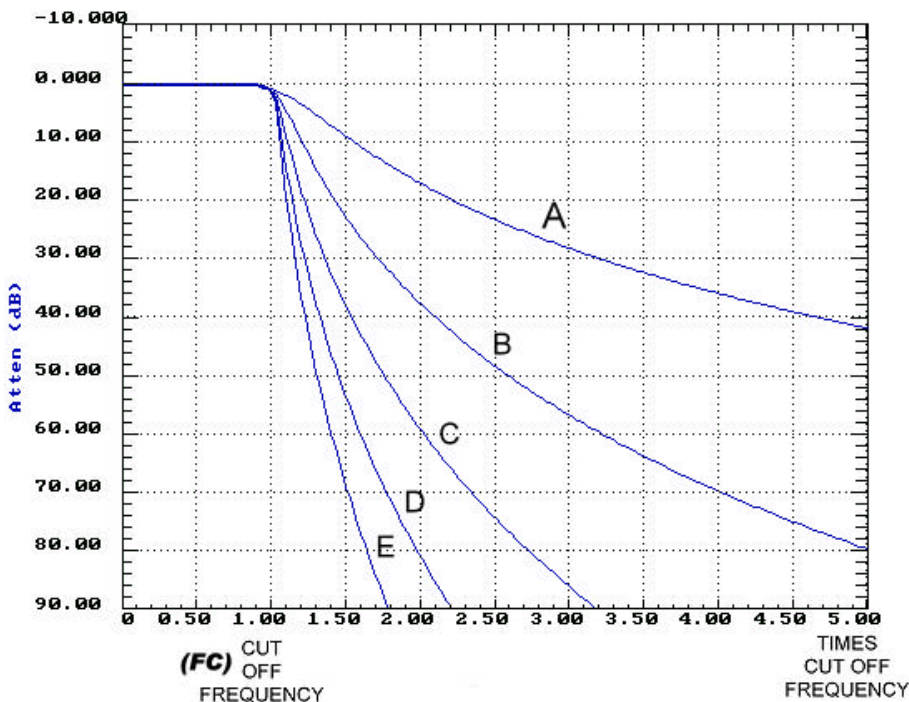


HIGH-POWER SERIES RF FILTERS

HIGH POWER LOWPASS FILTERS FROM 3 MHz TO 100MHz.

AVAILABLE IN 50, 200, 500 AND 1000-WATT VERSIONS. THESE FILTERS ARE DESIGNED TO BE USED IN ANY HIGH-POWER APPLICATION. SUITABLE FOR BANDWIDTH LIMITING ON HIGH POWER TRANSMITTERS. IMPEDANCE INVARIANT DESIGN IS COMPATIBLE WITH ALL ANTENNA TUNERS. MEETS APPLICABLE REQUIREMENTS OF MIL-STD-810E



SHAPE FACTOR	40 dB MIN @ X FC
A	5.7 X FC
B	2.3 X FC
C	1.6 X FC
D	1.4 X FC
E	1.3 X FC

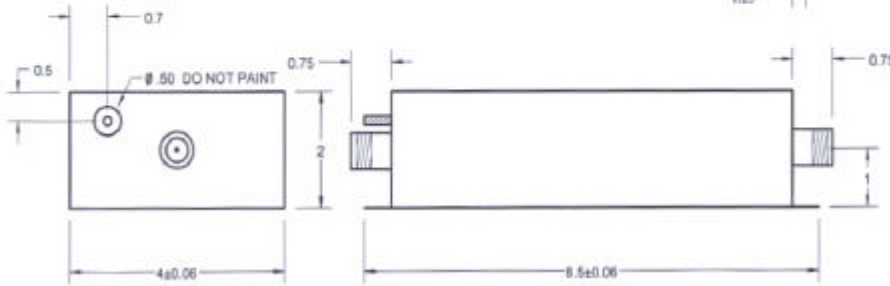
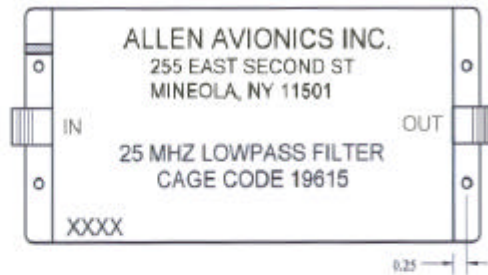
MULTIPLY THE CUTOFF FREQUENCY BY THE SHAPE FACTOR TO FIND THE 40dB FREQUENCY

FOR EXAMPLE CUTOFF FREQUENCY=3MHz WITH SHAPE FACTOR A. 40dB FREQUENCY= 3 MHz X 5.7=17.1 MHz OR SHAPE FACTOR B=3 MHz X 2.3= 6.9 MHz

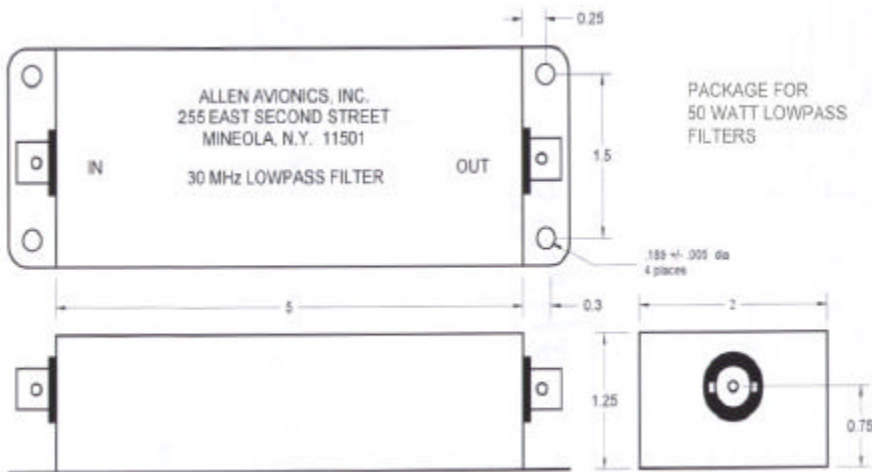
BASIC SPECIFICATIONS:

- Filter type = Lowpass Filter,
- Cutoff frequencies = 3 MHz - 100 MHz,
- Passband Insertion Loss < 0.3 dB, Typical
- VSWR better than 1.5 : 1 over Passband,
- Impedance is 50 Ohms,
- Rejection > 40 dB to 10 x Fc
- Power Handling = 50W, 100W, 500W, 1000W
- Mounting Brackets are supplied on all units
- Available connectors are BNC, TYPE N , UHF female
- 50 Watt versions available with SMA connectors

CASE FOR 200 WATT
500 WATT AND 1000 WATT
LOWPASS FILTERS



Cans are cold rolled Steel
Electro Tin plated or Hot Tin dipped.



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.

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 Hermetically 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

that are listed below:

(Environmental test methods)

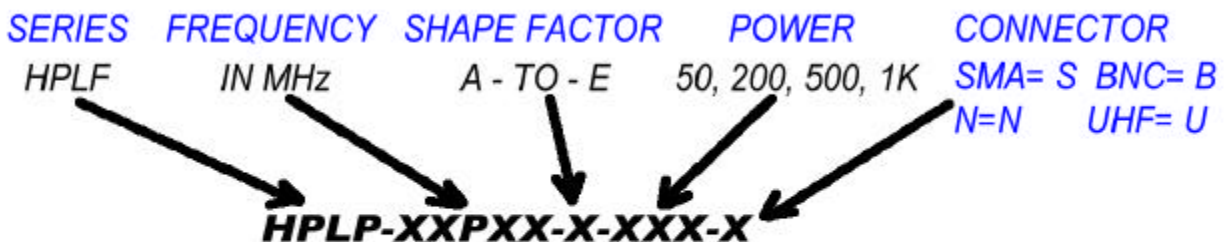
ALTITUDE: METHOD 500 3, PROCEDURE 1, 11, AND III TEST ALTITUDE FOR PROCEDURE III IS 4,570 METERS AT 57 2 kPa.

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.

SOLAR RADIATION: METHOD 505.3,



SAMPLE 10.5 MHz CUTOFF, SHAPE FACTOR A, 1000 WATTS, UHF CONNECTORS = HPLP-10P50-A-01K-U
3.25 MHz CUTOFF, SHAPE FACTOR E, 50 WATTS, SMA CONNECTORS = HPLP-03P25-E-050-S
100 MHz CUTOFF, SHAPE FACTOR B, 500 WATTS, TYPE N CONNECTORS = HPLP-100P0-B-500-N

CUTOFF FREQUENCY	SHAPE FACTOR (SEE GRAPH)	40 dB FREQUENCY
3.0 MHz	A	17.1 MHz
	B	6.90 MHz
	C	4.80 MHz
	D	4.20 MHz
	E	3.90 MHz
5.0 MHz	A	28.5 MHz
	B	11.5 MHz
	C	9.20 MHz
	D	7.00 MHz
	E	6.50 MHz
10.0 MHz	A	57.0 MHz
	B	23.0 MHz
	C	16.0 MHz
	D	14.0 MHz
	E	13.0 MHz
15.0 MHz	A	85.5 MHz
	B	34.5 MHz
	C	24.0 MHz
	D	21.0 MHz
	E	19.5 MHz
20.0 MHz	A	114 MHz
	B	46.0 MHz
	C	32.0 MHz
	D	28.0 MHz
	E	26.0 MHz
25.0 MHz	A	142 MHz
	B	57.5 MHz
	C	40.0 MHz
	D	35.0 MHz
	E	32.5 MHz
30.0 MHz	A	171 MHz
	B	69.0 MHz
	C	48.0 MHz
	D	42.0 MHz
	E	39.0 MHz

CUTOFF FREQUENCY	SHAPE FACTOR (SEE GRAPH)	40 dB FREQUENCY
40.0 MHz	A	228 MHz
	B	92.0 MHz
	C	64.0 MHz
	D	56.0 MHz
	E	52.0 MHz
50.0 MHz	A	285 MHz
	B	115 MHz
	C	80.0 MHz
	D	70.0 MHz
	E	65.0 MHz
60.0 MHz	A	342 MHz
	B	138 MHz
	C	96.0 MHz
	D	84.0 MHz
	E	78.0 MHz
70.0 MHz	A	399 MHz
	B	161 MHz
	C	112 MHz
	D	98.0 MHz
	E	91.0 MHz
80.0 MHz	A	456 MHz
	B	184 MHz
	C	128 MHz
	D	112 MHz
	E	104 MHz
90.0 MHz	A	513 MHz
	B	207 MHz
	C	144 MHz
	D	126 MHz
	E	117 MHz
100 MHz	A	570 MHz
	B	230 MHz
	C	160 MHz
	D	140 MHz
	E	130 MHz