7-539

CHELTON

V/UHF Low Pass Filter

The **7-539** is a V/UHF low pass filter designed to pass signals in the frequency range 30 MHz to 530 MHz and stop signals in the frequency range 960 MHz to 1220 MHz. The filter is intended for use in general subsonic airborne applications.

The **7-539** comprises a discrete component filter assembly housed within an aluminium alloy box, and enclosed at each end by the RF connectors. The structure is foam filled to prevent the ingress of moisture.

The **7-539** is configured as a Tchebyscheff filter.

ELECTRICAL

Pass Band	30 MHz - 530 MHz
Impedance	50 ohm (nominal)
VSWR	< 1.5:1
Insertion Loss	< 0.5 dB
Stop Band	960 MHz - 1220 MHz
Isolation	> 60 dB
Power Handling	50 W CW (maximum)
Connectors	N Type Female N Type Male

MECHANICAL

Dimensions (mm) (including connectors)	123.444 x 26.516 x 26.516 (maximum)
Weight (kg)	0.18 (maximum)

ENVIRONMENTAL

High Temperature	MIL-STD-810F, Method 501.4 Operational: +55°C Intermitttent: +71°C Storage: +85°C
Low Temperature	MIL-STD-810F, Method 502.4 Operational: -54°C Storage: -57°C
Altitude	MIL-STD-810F, Method 500.4 9144 m
Temperature Shock	MIL-STD-810F, Method 503.4
Vibration	MIL-STD-810F, Method 514.5, Procedure I, Categories 12 and 13
Shock	MIL-STD-810F, Method 516.5, Procedures I and V Functional: 20g, 11ms terminal sawtooth Crash Safety: 40g, 11ms terminal sawtooth
Salt Fog	MIL-STD-810F, Method 509.4, Procedure I
Humidity	MIL-STD-810F, Method 507.4
Rain	MIL-STD-810F, Method 506.4 Procedure III (Drip)
Magnetic Influence	RTCA DO-160E, Section 15, Class Z Less than 1° deflection at 300 mm

V/UHF Low Pass Filter

123.444 mm max

78.232 mm

20.828 mm max (typ)

26.516 mm max

26.516 mm max

J1

J2

MOD | 1 2 3 4 5 6 7 8 9 10