12-147

CHELTON

V/UHF Passive dual-band blade

Key features:

- Dual Band
- Lightning protection

The 12-147 antenna is a high efficiency passive blade antenna covering the frequency bands 108-174 MHz and 225-400 MHz and intended for general airborne applications.

The antenna is configured as a broadband fan, passively matched. Resistive padding is included to preserve match at low frequencies. Lightning protection is incorporated within the antenna by using a diverter strip on the radome and a surge arrester at the RF connector.

ELECTRICAL

Frequency	108-174 MHz
Range (MHz)	225-400 MHz
Impedance	50 Ω
VSWR	108-118 MHz ≥ 6.0 dB (≤ 3.0:1)
	118-174 MHz ≥ 7.3 dB (≤ 2.5:1)
	225-400 MHz ≥ 7.3 dB (≤ 2.5:1)
Gain	108-118 MHz > -5 dBi
	118-174 MHz > -1 dBi
	225-400 MHz > -1 dBi
Polarisation	Vertical
Radiation	Azimuth:
	Elevation:
	Essentially omnidirectional
	Nominally co-sinusoidal
Power	108-174 MHz 30 W CW max
Handling	

MECHANICAL

Dimensions (LxWxH)	301 x 92 x 400 mm
Mass	1.95 kg
Connector	TNC Female
Platform(s)	Air

ENVIRONMENTAL

	MIL-STD-810
	RTCA DO-160
Continuous	- 40°C Min
Operating Temperature	+ 85°C Max
Altitude	25000 ft
Vibration	MIL-STD-810E, Method 514.4, Proc l, Cat 6 mod + Gunfire

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