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AS-49061 MONOPOLE BLADE ANTENNA

The AS-49061 flew on the High Endoatmospheric Defense Interceptor Kinetic Kill Vehicle Integrated Technology Experiment. It was used in support of the flight termination system. It is a monopole blade antenna encased in fused silica. This antenna type is inherently linear. The materials used in the construction of the antenna were chosen to minimize the effects of the severe environments.

A resin quartz composite heat shield was mounted to the antenna to make the antenna flush with the heat shield of the vehicle. The mounting flange can be modified to meet the mounting requirements of a particular vehicle.

ELECTRICAL

Frequency range	408 MHz to 430 MHz
VSWR	2.0:1, max
Gain, peak	-3.5 dBi, min*
Gain, over 170° BW	-10 dBi, min*
Pattern shape	Omnidirectional
Polarization	Linear
Bandwidth	1 MHz
Power handling	1W CW

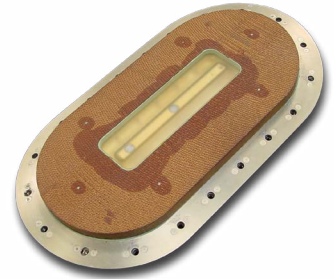
MECHANICAL

Connector	SMA female
Weight	1.6 lbs (726kg)

ENVIRONMENTAL

Temperature shock	-14.8° F (-26° C), +249.8° F (121° C)				
Altitude	Operating 21 mmHg to 8 mmHg				
Humidity	MIL-STD-810D method 507.3 procedure I natural				
Pyrotechnic shock	Triaxial Freq: 50-20,000, G Level: 150-4,653				
Vibration This unit was designed for 2500° F for 5 minutes and 5000° F for 10 to 30 seconds. It has flown several successful missions	Freq. (Hz) 20-110 110-430 430-1000 1000-2000 2000-3000 3000-4000	g ² 0.04 1.1 4.5	dB/oct +7.3 +6.1 -3.0	ε _{rms} 104.0	Duration/Axis 30 sec/ axis

*Typical gain values with antenna mounted on a 4' x 4' flat ground plane. Performance may vary depending on ground plane/vehicle size and dia.



KEY FEATURES

- > Tunable monopole blade
- > Rugged construction encased in fused silica
- > Flush mountable
- > Ideal for extreme environment and space type applications

For further details and specifications, contact the factory at antenna.info@L3Harris.com

AS-49061 Monopole Blade Antenna

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Nonexport-controlled Information

L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



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