



# AS-49034 CAVITY-BACKED HELIX ANTENNA

The AS-49034 consists of a cavity-backed helix antenna. The dielectric material for the antenna is fused silica. This antenna is inherently circularly polarized. 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 collar 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	2.0 to 2.3 GHz				
VSWR	2.5:1, max				
Gain	+3 dBi, min				
Polarization	Right hand circular				
3 dB beamwidth	80°, min				
Axial ratio	3 dB, max				
Power handling	2W avg, 200W Peak				
MECHANICAL					
Connector	TNC female				
Weight	40 ounces (1,14 kg)				
Finish	Chemical film per Mil-C-5541				
ENVIRONMENTAL					
Temperature	-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	Freq. (Hz)	g2	dB/oct	Grms	Duration/Axis
This unit was designed for 2500° F for 5 minutes and 5000° F for 20 to 30 seconds.	20-300	0.04			
	300-450		15.9		
	450-1000	0.34			
	1000-2000		+6.1		
	2000-3000	1.4		49.3	4 min/axis



## KEY FEATURES

- > High temperature cavity backed helix spiral
- > Rugged construction
- > Flush mountable
- > Ideal for extreme environment telemetry, tracking, communication and applications

**For further details and specifications, contact the factory at [antenna.info@L3Harris.com](mailto:antenna.info@L3Harris.com)**

### AS-49034 Cavity-Backed Helix Antenna

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