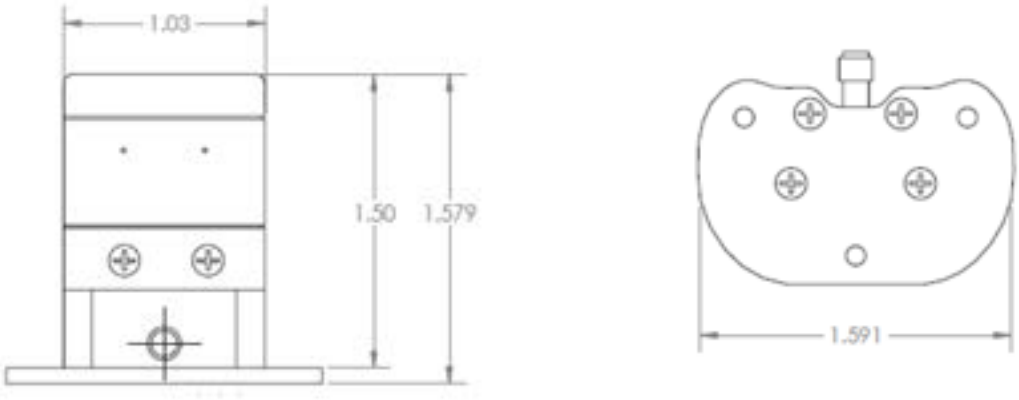
PRODUCT BRIEF

RELEASE DATE 7/16/20

Model 8503661
Dual Spiral Antenna

Model 8503661 is an integrated antenna assembly consisting of a pair of planar spiral antennas of opposing (Left and Right-hand) polarization with an integrated, high-speed, switch, and radome assembly. The output of the assembly is either the left- or right-hand polarized apertures, as determined by the RF switch setting. The RF switch is controlled via the application of a DC-Bias to the coaxial center-pin. No other control circuits are required for operation of the 8503661. The 8503661 has been designed and qualified for the military airborne environment and for most applications, including supersonic flight, the 8503661 does not require any additional aerodynamic protection.

PHYSICAL CONFIGURATION



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FREQUENCY RANGE:	• 24 - 40 GHz
VSWR:	• 2.5 : 1 (80%)
IMPEDANCE:	• 50 Ohms
POLARIZATION:	• Circular (LH and RH)
BEAMWIDTH, 3dB:	• 75 degrees (nominal)
BEAMWIDTH, 10 dB:	• 140 degrees (nominal)
GAIN, BORESIGHT:	• +0 dBli (nominal)
AXIAL RATIO, BORESIGHT:	• 3 dB
BEAMSQUINT:	• +/- 5 degrees
ISOLATION:	• 20 dB typical
DC-BIAS:	• +/- 5 VDC
WEIGHT:	• 0.50 lb
CONNECTOR:	• 2.4 mm
FINISH (HOUSING):	• MIL-C-5541, Class 3

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