

Overview

Southwest Antennas Part # 1085-220 is an omni-directional antenna featuring a 4 section collinear element design that offers 6 dBi of peak gain across the antenna's 4.4 - 5.0 GHz operating frequency range. The antenna features a weatherproof sealed spring base for operation in all weather conditions and a TNC(m) RF connector.

The antenna's integrated RF bandpass filter helps to eliminate interference from other co-located radios operating outside of the antenna's 4.4 - 5.0 GHz operational frequency range, providing increased performance for attached radios.

Features:

- Broad Band Coverage
- 4.4 - 5.0 GHz
- 4 Section Collinear
- 6 dBi Omni Radiation Pattern
- Integrated 4-Pole RF Bandpass Filter
- Rugged Construction
- Low-Glare Black Radome
- Weatherproof Sealed Spring Base
- End Cap Lettering "C"
- Black Chrome TNC(m) RF Connector



Antenna Specifications

Parameter	Value	Units	Tolerance
Antenna Pattern	Omni		
Frequency Band	C		
Impedance	50	Ohms	
Minimum Frequency	4.4 / 4,400	GHz / MHz	
Maximum Frequency	5.0 / 5,000	GHz / MHz	
Frequency Bandwidth	0.6 / 600	GHz / MHz	
Maximum VSWR	2:1	Ratio	
Maximum Gain	6	dBi	
Polarization	Vertical		
Maximum RF Input Power	8	Watts	
Horizontal (AZ) Beamwidth	360	Degrees	
Vertical (EL) Beamwidth	30	Degrees	
Ground Plane Required	No		
Radome Material	Fiberglass		
Color	Black		
Spring or Gooseneck	Spring		
Spring Length	0.750 / 19.050	inches / mm	
Spring Diameter	0.750 / 19.050	inches / mm	
Spring Bend	±45	Degrees	Maximum (exceeding ±45 degrees may damage spring weather seal)
Maximum Wind Velocity	62 / 100	mph / kph	
RF Connector Type	TNC(m)		



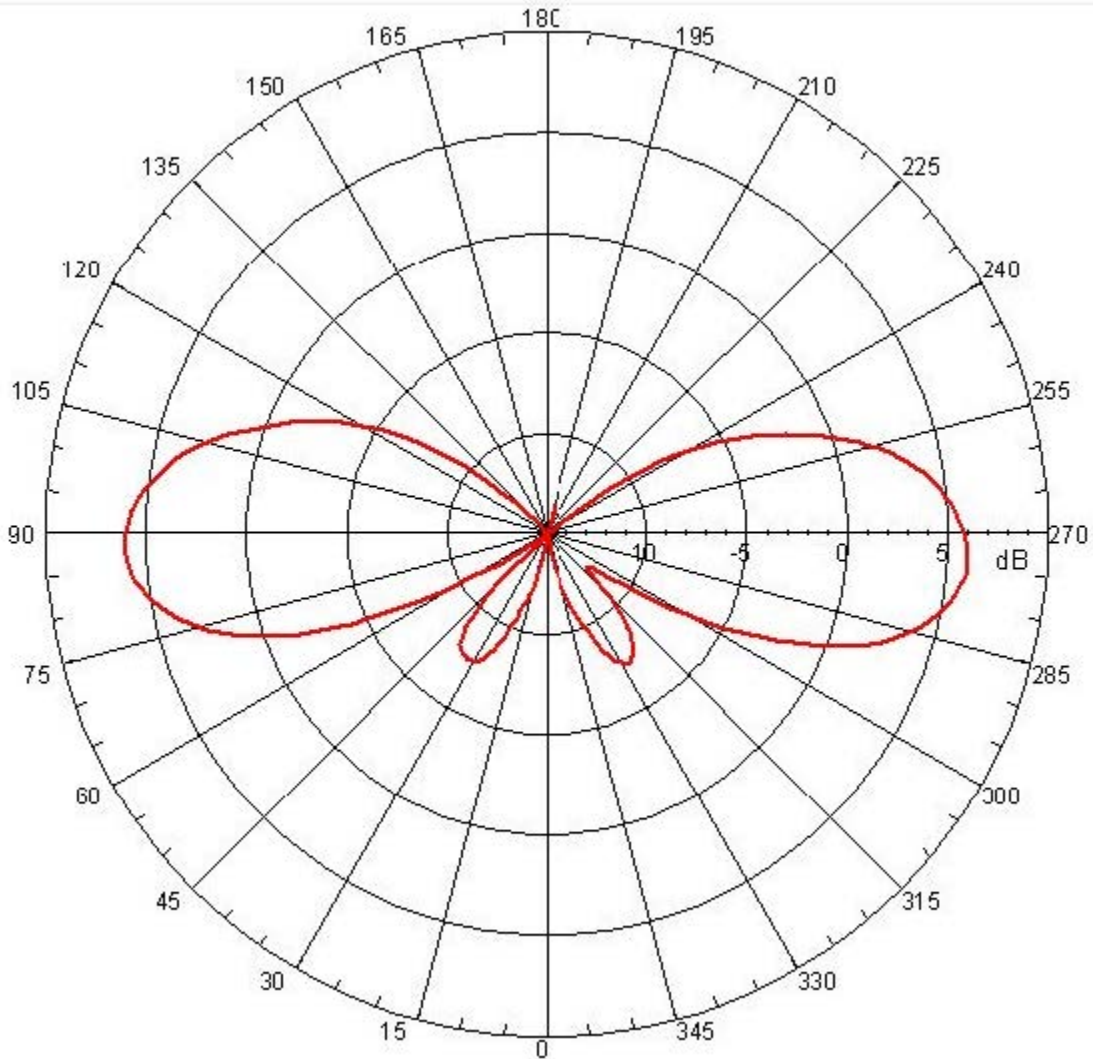
Part # 1085-220

**Omni Antenna, 4 Section Collinear, 4.4 - 5.0 GHz, 6 dBi Gain, Weatherproof
Sealed Spring Base, TNC(m) RF Connector, Internal Bandpass Filter**

Parameter	Value	Units	Tolerance
RF Connector Features	Black Chrome		
Product Height	11.220 / 284.988	inches / mm	±.13"
Product Diameter	0.812 / 20.625	inches / mm	+.020" / -.000"
Product Weight	3.70 / 104.89	oz / grams	

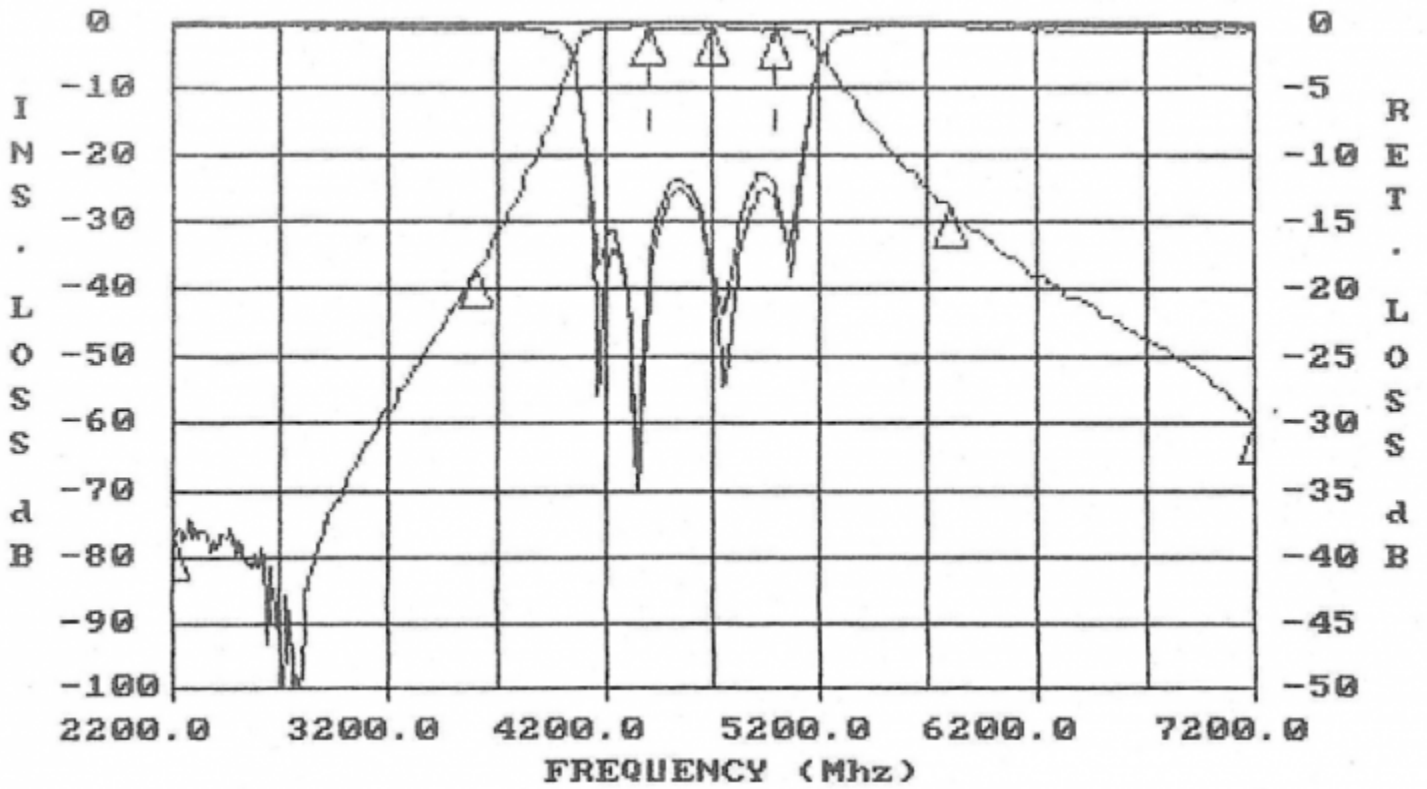
Filter Specifications

Parameter	Value	Units	Tolerance
Filter Type	3mm 4-Pole Bandpass Filter (ceramic)		
Fo	4.7 / 4,700	GHz / MHz	
Filter Frequency Band	C Band		
Filter Impedance	50	Ohms	
Filter Min Frequency	4.4 / 4,400	GHz / MHz	
Filter Max Frequency	5.0 / 5,000	GHz / MHz	
Insertion Loss	0.8	dBa	Maximum @ 4,700 MHz
Return Loss	10	dB	From 4,400 MHz to 5,000 MHz
Rejection 1	-25	dBc	Min DC to 3,600 MHz
Rejection 2	-25	dBc	Min 5,800 MHz to 9,400 MHz
Operating Temp	-40 to +85	C	



Elevation Pattern

Referenced to +10 dBi



Filter Response Plot



Engineering Drawing

All dimensions are in inches