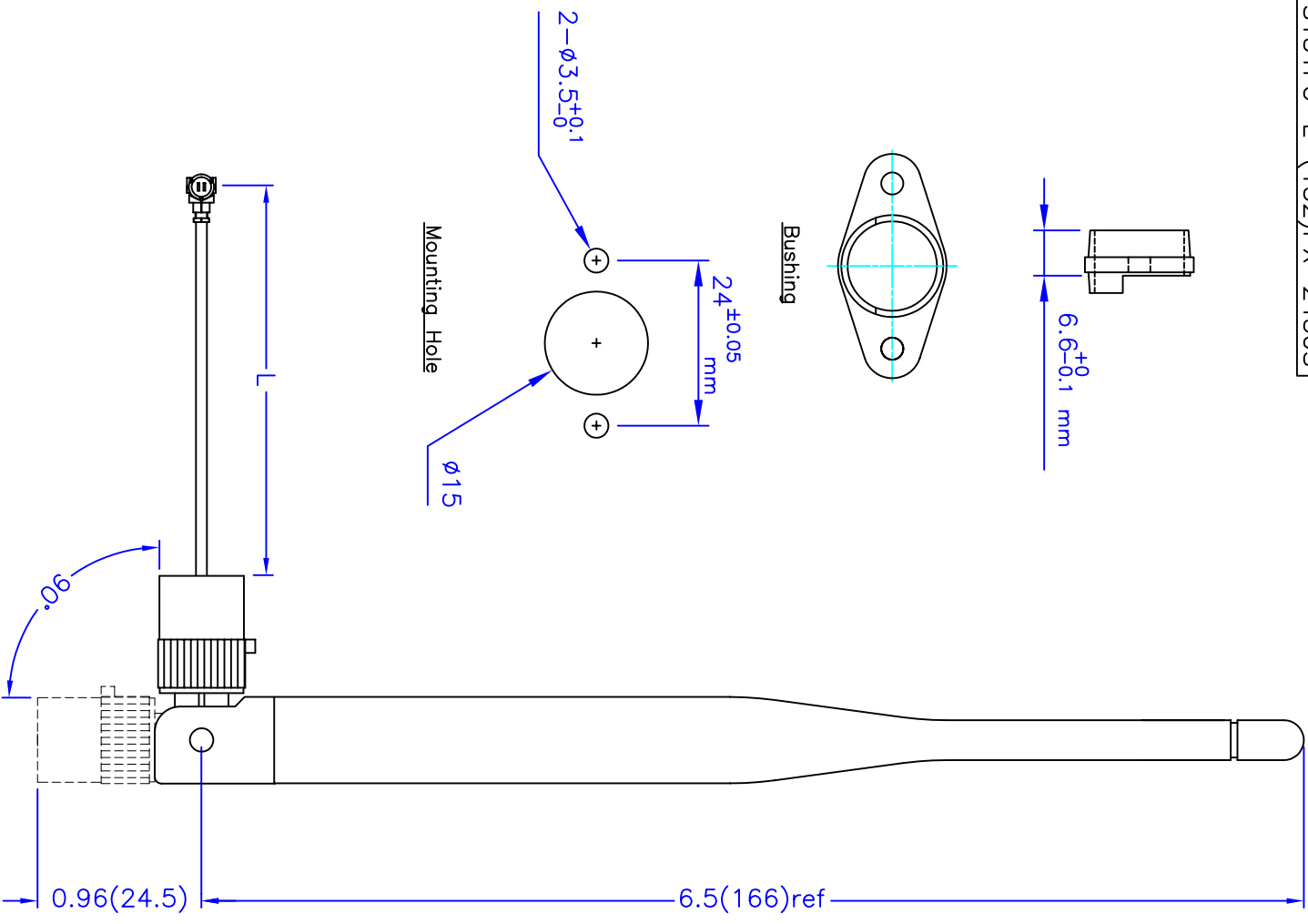


Two hardware versions:

1. Hardware version that uses external Nearson antenna with u.fl RF connector
2. Hardware version that uses the integral chip antenna WIC2450-A.

Antenna spec sheets are in following pages.



Electrical Properties:

Frequency Range: 2.4~2.5 GHz  
 Impedance: 50Ω nominal  
 VSWR: <2.0:1  
 Gain: \*5.0 dBi  
 Radiation: Omni  
 Polarization: Vertical  
 \*Gain is measured under without flying lead.

Mechanical Properties:

Cable: 1.32 mm diameter, 50-ohm coaxial specified in inch.  
 Cable Length: Hirose U.FL compatible(female);  
 Connector:  
 Material: Polyurethane(Black); BASF  
 Overmold: Polyurethane(Black); BASF and Polycarbonate(Black); Bayer  
 Swivel:  
 Operation Temp.: -20°C to +65°C  
 Storage Temp.: -30°C to +75°C

TITLE	2.4 GHz Fixed Mount Swivel Antenna - 151 Model	DATE	SHEET
UNIT	DWG. NO. S151FC-L-(132)PX-2450S		1 of 1
in.(mm)			
SCALE			
None			

**NEARSON**

## BlackChip™

Model Number:  
**WIC2450-A**

### Internal Antenna – Surface Mount

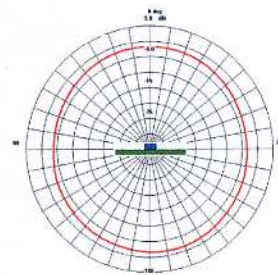
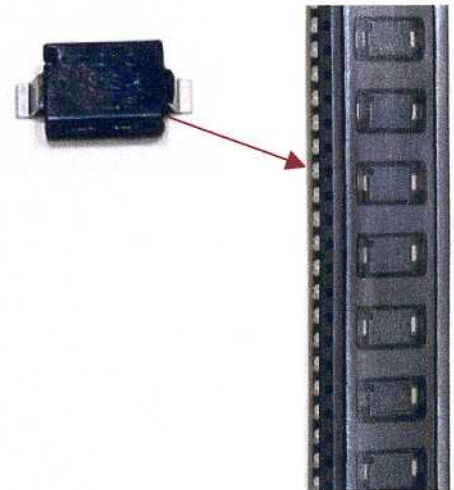
#### Specifications:

- Small and lightweight
- Wide bandwidth, ultra-wide band capable
- Available in tape and reel packaging
- SMT compatible including lead free processes
- Conformance to European RoHS Directive 2002/95/EC

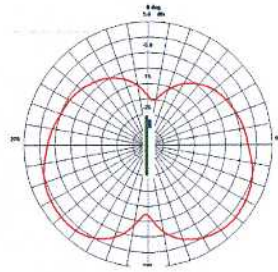
<b>Frequency Range</b>	2.4 – 2.5 GHz	4.9 – 6.0 GHz
<b>Peak Gain</b>	> 2 dBi	> 3 dBi
<b>Polarization</b>	Linear	
<b>Nominal Impedance</b>	50 ohms	
<b>SWR (Min. Performance)</b>	<2.0:1	
<b>Temperature Range</b>	-40° to +85°C	
<b>Vibration</b>	6G RMS (9.04g <sup>2</sup> /Hz) for 15 minutes each in vertical and horizontal. No appearance or functional change.	
<b>Thermal Shock</b>	Four repeated cycles of 1 hr. at +85°C and 1 hr. at -40°C. No appearance or functional change.	
<b>Radiating Element Size</b>	8 x 6 x 2.5 mm (L x W x H)	
<b>Physical Mass</b>	0.21 grams	
<b>Length w/ Solder Tabs</b>	12mm	

#### Connectors:

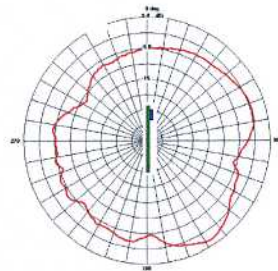
Model #	Part #	Description	Connector
<b>WIC2450-A</b>	MAF95029	Tape and Reel	N/A
<b>WIC2450-A-SM</b>		Ultrawide-band on eval board	SMA-female Edge-mount



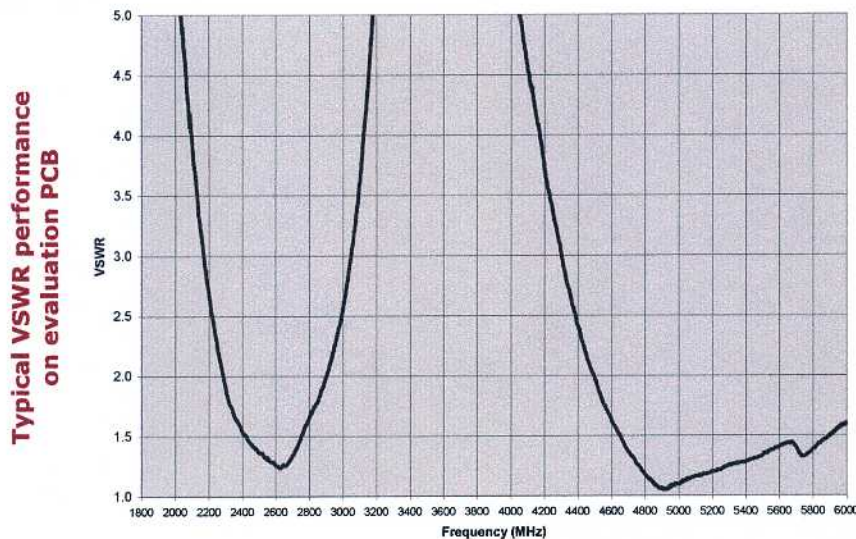
**Azimuth**  
2.45 GHz  
Free Space



**Elevation**  
**phi=0**  
2.45 GHz  
Free Space



**Elevation**  
**phi=0**  
5.8 GHz  
Free Space



Specifications subject to change without notice.

WIC2450-A a - 12/23/05