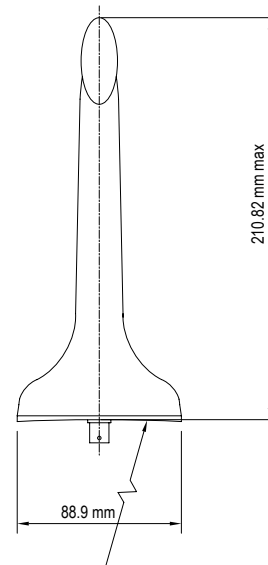
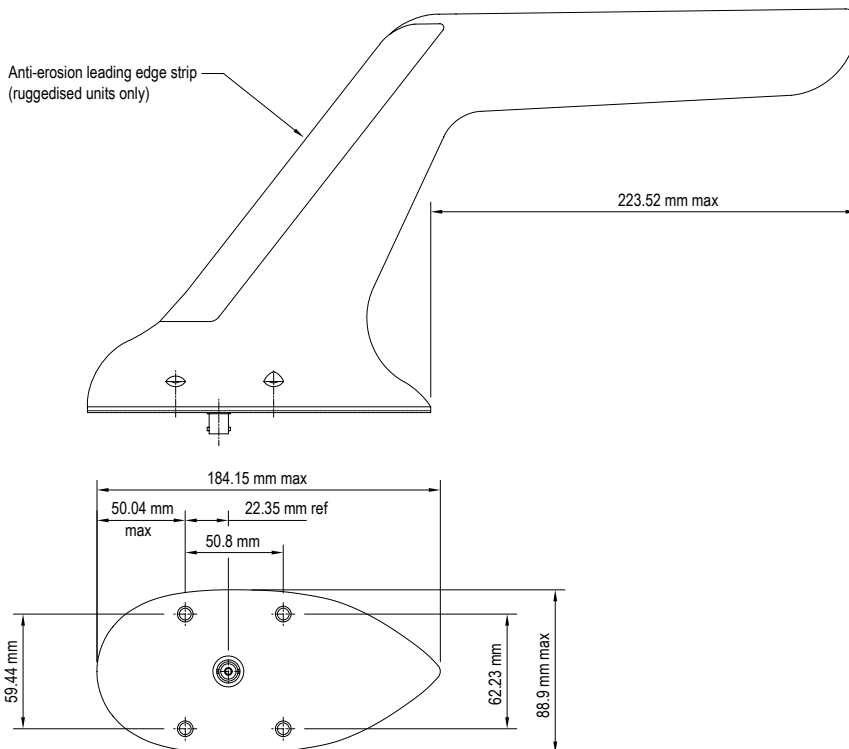
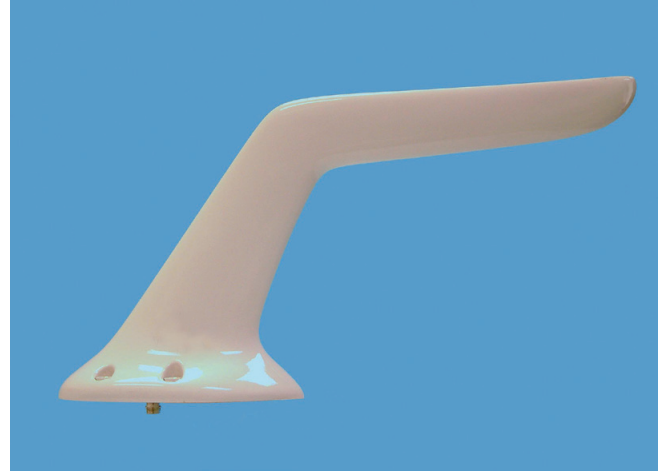


## VHF Antenna

The 21-38 Series of VHF antennas are low profile blade antennas for general airborne application. The series covers a variety of frequency bandwidth requirements according to type.

If intended for homing use they are supplied as matched pairs, in which case a common serial number is suffixed by the letter A or B. The omission of this suffix indicates that the antenna is for communications use and that the phase stability requirements are not applicable.

The 21-38 antennas consist of a high performance GRP blade, housing an RF matching assembly, mounted on aluminium alloy baseplate with a single RF female connector.



On radiused antennas part number is defined on baseplate as follows:  
36" rad = 21-38-1RF/36



## VHF Antenna

## ELECTRICAL

<b>Type</b>	21-38	21-38-1 21-38-1RF 21-38-1RF/XX*	21-38-2	21-38-3	21-38-4	21-38-5	21-38-6	21-38-8	21-38-10	21-38 (59 - 63)
<b>Frequency Range (MHz)<sup>1</sup></b>	108 - 174	118-137	118-153	118-174	137-174	137-175 243 ± 3	121.5 ± 3 156.8 ± 2 243 ± 3	108-174	74-88	59-63
<b>Impedance (nominal)</b>	50 Ω									
<b>VSWR</b>	2.5:1									
<b>Radiation Pattern</b>	Nominally Omnidirectional in Azimuth									
<b>Gain</b>	-3 dBi min	0 dBi min	-3 dBi min	-3 dBi min	+1 dBi min	135-175 (-1 dBi min) 243 -1 dBi (min)	121.5 ± 2 -1 dBi (min) 156.8 ± 2 -1 dBi (min) 243 ± 3 -0 dBi (min)	-4 dBi min	-8 dBi (ave min) -11 dBi (min)	-9 dBi (ave full band)
<b>Power Handling (max)</b>	50 W cw	20 W cw	50 W cw			Rx only		50 W cw		
<b>Phase (between pairs)</b>	N/A					3° (max)	3° (max)	N/A		
<b>Polarisation</b>	Essentially vertical (when mounted vertically)									
<b>Connectors</b>	Type 'BNC' Female or 'TNC' Female if Part No. suffixed by 'T'									

## ENVIRONMENTAL

<b>Temperature and Altitude</b>	RTCA DO-160E, Section 4, Category F2
<b>Humidity</b>	RTCA DO-160E, Section 6, Category C
<b>Shock</b>	RTCA DO-160C, Section 7 Operational: 6g,11ms Crash Safety (Impulse): 15g,11ms Crash Safety(Sustained): 12g,3secs
<b>Vibration</b>	RTCA DO-160C, Section 8, Categories C, J, L, M & Y
<b>Waterproofness</b>	RTCA DO-160C, Section 10, Category R
<b>Fluid Susceptibility</b>	RTCA DO-160C, Section 11, Category F

## MECHANICAL

<b>Dimensions (LxWxH)</b>	408 x 89 x 210 mm
<b>Weight</b>	0.8 kg max

