

dBD Communications Ltd  
Film Antennas JFA1036 & JFA1052  
PRODUCT MANUAL

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Registered in England No. 3709534

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## 1. Description

Film antenna, discreet VHF/UHF antenna for vehicle use and telemetry applications. Attached to a transparent adhesive membrane, supplied with a backing strip, when fitted is virtually unnoticeable. No visible whip to vandalize. A film antenna is a discreet VHF/UHF antenna for vehicle use and telemetry applications.

This film antenna can be attached to a clean none-metallic surface such as the rear windscreen of a vehicle. Without a visible whip to vandalize and no external projection parts this antenna is inconspicuous and car wash proof.

The film is 200 microns thick and has a BNC/GT- 5 connector attached to RG174 cable. The cable can be terminated at the centre and the end of the antenna.

The antenna is attached to a transparent adhesive membrane, which is supplied with a backing strip and when fitted is virtually unnoticeable.

## 2. Applications

- Remote monitoring of mobile heavy equipment & assets
- Logistical tracking of trucks, trailers & vans
- Covert vehicle tracking for security purposes

## 3. Installation

Peel back the backing surface and apply to a clean non-metallic surface. Electrical contact with the film is made using the adhesive connector-cable.



## 4. Electrical/ Mechanical Specification

### 4.1. JFA1052 Film Antenna Centre Feed

Frequency Range:	138 - 512 MHz
Gain:	Unity
Polarization:	Linear
VSWR:	<2:1
Connector:	BNC plug, TNC plug, Mini-UHF or any type

### Mechanical Specification:

Length:	814 mm
Width:	30 mm
Weight::	90 g
Colour Finish:	Red, self adhesive surface

## 4.2. JFA1036 Film Antenna End Feed

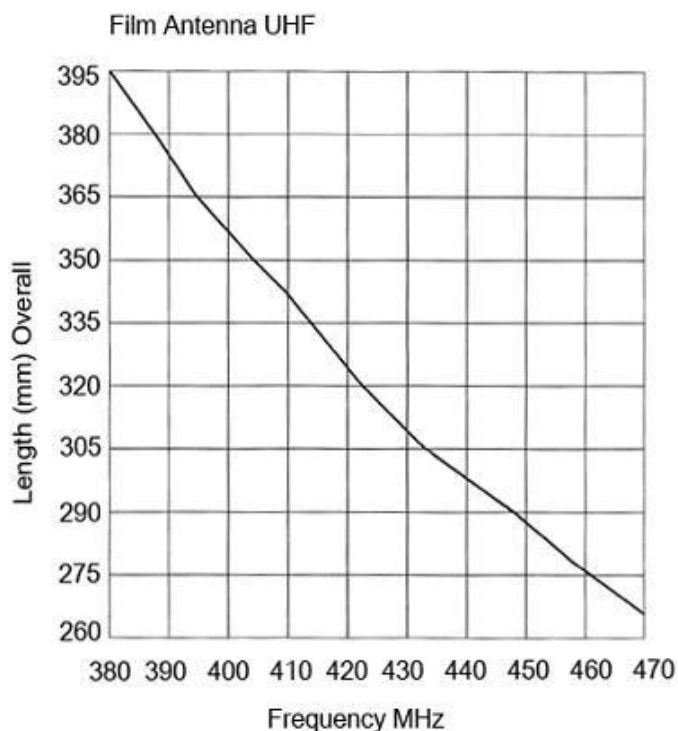
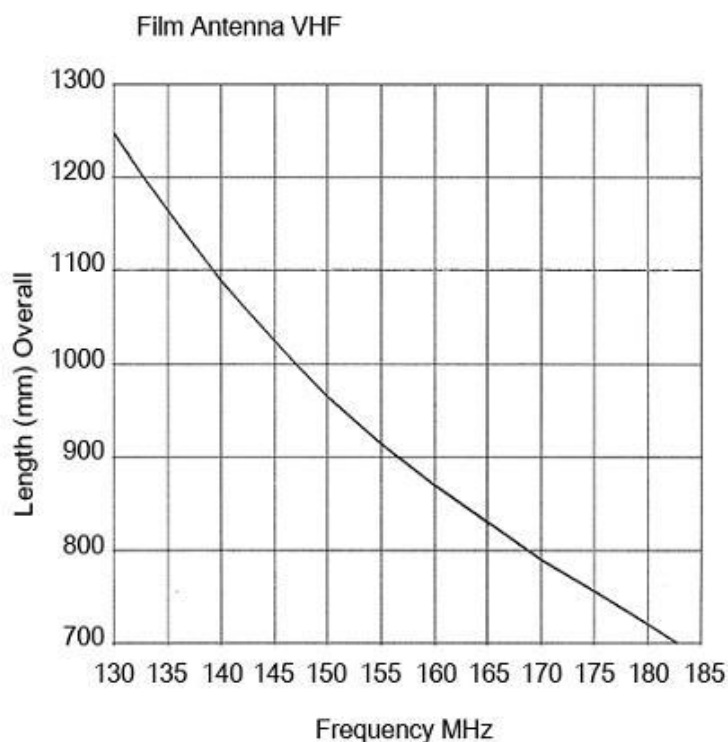
Frequency Range:	138 - 512 MHz
Gain:	Unity
Polarization:	Linear
VSWR:	<2:1
Connector:	BNC plug, TNC plug, Mini-UHF or any type

### Mechanical Specification:

Length:	760 mm
Width:	20 mm
Weight::	90 g
Colour Finish:	Red, self adhesive surface

## 5. JFA1036/ JFA1052 Film Antenna

### Cutting Chart:



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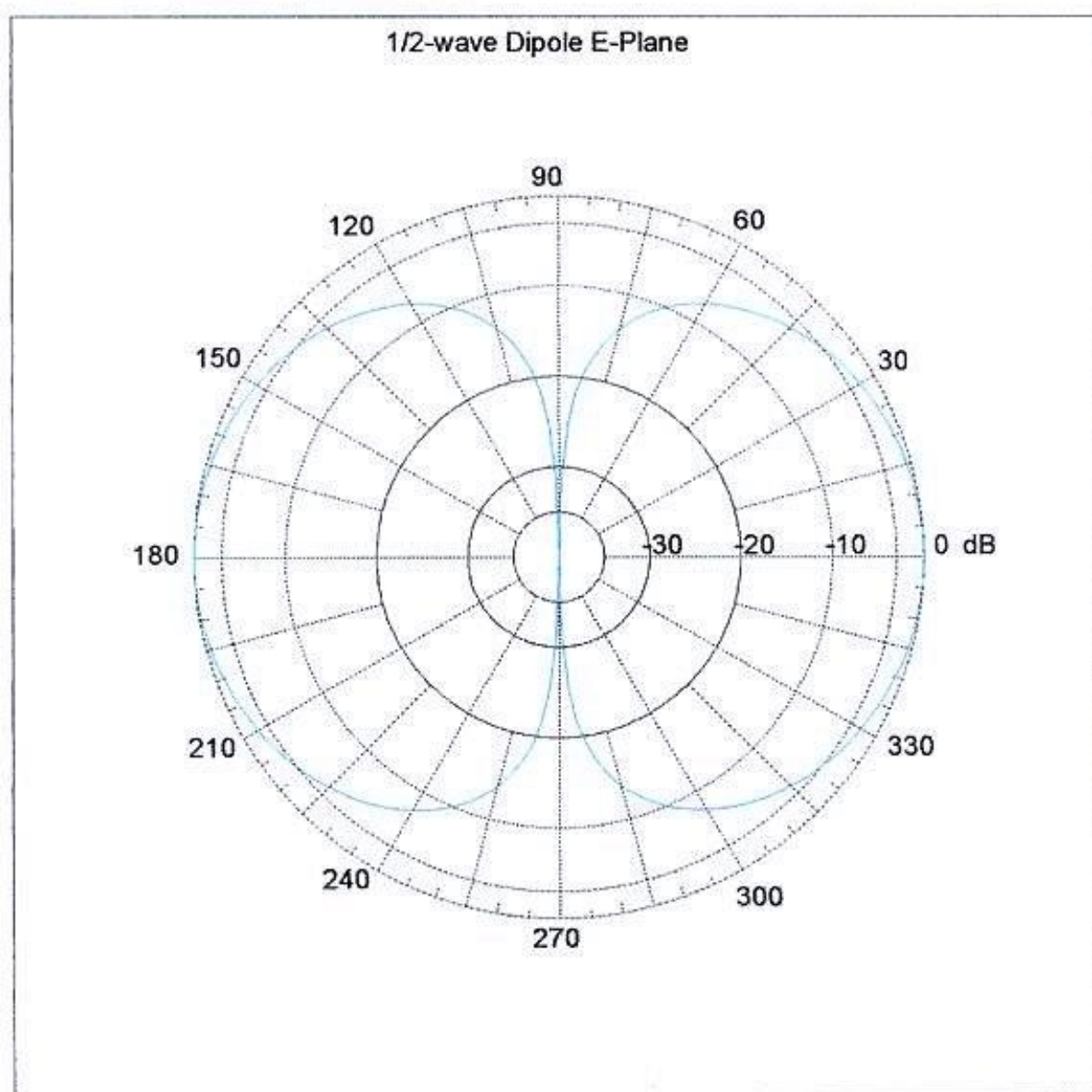
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## 6. JFA1036/ JFA1052 Film Antenna

### Radiation Pattern:



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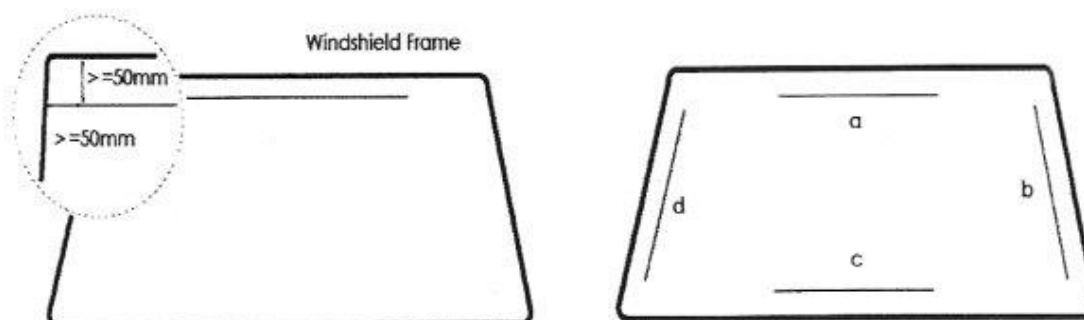
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## 7. JFA1036/ JFA1052 Film Antenna

### Installation Notes

1. Glass surface should be clean and free from dust particles
2. Glass should be at room temperature, otherwise film adhesive can appear cloudy
3. Glass should be between 4-6mm thick. Thicker glass may require the antenna to be retuned
4. We recommend that you use a VSWR meter to ensure that the film antenna is correctly in tune (VHF films only). In the case of the un-tuned SL film antenna, temporarily adhere the film to the windscreen, fibreglass or plastic, check VSWR, snip both ends of the film with scissors in 1cm units until a satisfactory VSWR is achieved, at this point adhere the film
5. Ensure the top film protecting the antenna contact points is removed
6. Ensure the backing film is removed using the pull tabs
7. Avoid getting fingerprints on the film adhesive
8. If placing on the rear windscreen, avoid placing the film across the demister elements. If in doubt, place the antenna without adhering it in the required position and test tuning with VSWR meter
9. When adhering the film to the glass, make sure that no air bubbles are present
10. Make sure you have enough room to adhere the connector
11. Peel the backing tape from the connector using the pull tabs
12. Line up the connector terminal points with the points on the film
13. Apply pressure for 20-30 seconds noting that the adhesive cures over a period of 5-10 minutes



Optimum Installation Positions  
are a,b,and d