

# Host Unit Antenna Information

## 1. Antenna Specification

### Transmission Antenna assembly overview

Notes:

- 1a. Includes all cable losses.  
1b. Antenna type should be Omni Directional.

#### IBM ThinkPad T40 Series, LCD 14inch model

| Designator<br>(Parts Number)                             | Manufacture                                  | Antenna type               | Cable type<br>and length | Gain (dBi)<br>Note 1)      |
|--|--|----------------------------|--------------------------|----------------------------|
| Bluetooth antenna<br><b>62P4256</b><br><b>91P6901</b> *2 | <b>Foxconn Electronics<br/>Inc. (R.O.C.)</b> | <b>Meander<br/>Antenna</b> | <b>Coax<br/>265 mm</b>   | <b>1.20 dBi<br/>(peak)</b> |

\*2: non-lead soldering antenna according to RoHS environmental direction.

The radiation characteristics (gain and Omni directional pattern) of both are the same.

#### IBM ThinkPad T40 Series, LCD 15 inch model

| Designator<br>(Parts Number)        | Manufacture                                  | Antenna type               | Cable type<br>and length | Gain (dBi)<br>Note 1)      |
|-------------------------------------|--|----------------------------|--------------------------|----------------------------|
| Bluetooth antenna<br><b>91P6842</b> | <b>Nissei Electric Co.,<br/>Ltd. (Japan)</b> | <b>Meander<br/>Antenna</b> | <b>coax<br/>230mm</b>    | <b>2.84 dBi<br/>(peak)</b> |

#### IBM ThinkPad R50 Series, LCD 14/15 inch model

| Designator<br>(Parts Number)        | Manufacture                           | Antenna type               | Cable type<br>and length | Gain (dBi)<br>Note 1)      |
|-------------------------------------|---------------------------------------|----------------------------|--------------------------|----------------------------|
| Bluetooth antenna<br><b>91P6817</b> | <b>Hitachi Cable Ltd.<br/>(Japan)</b> | <b>Meander<br/>Antenna</b> | <b>coax<br/>265mm</b>    | <b>2.16 dBi<br/>(peak)</b> |

#### IBM ThinkPad X30 Series

| Designator<br>(Parts Number)        | Manufacture                                  | Antenna type               | Cable type<br>and length | Gain (dBi)<br>Note 1)      |
|-------------------------------------|--|----------------------------|--------------------------|----------------------------|
| Bluetooth antenna<br><b>46L4680</b> | <b>Nissei Electric Co.,<br/>Ltd. (Japan)</b> | <b>Meander<br/>Antenna</b> | <b>coax<br/>180mm</b>    | <b>1.80 dBi<br/>(peak)</b> |

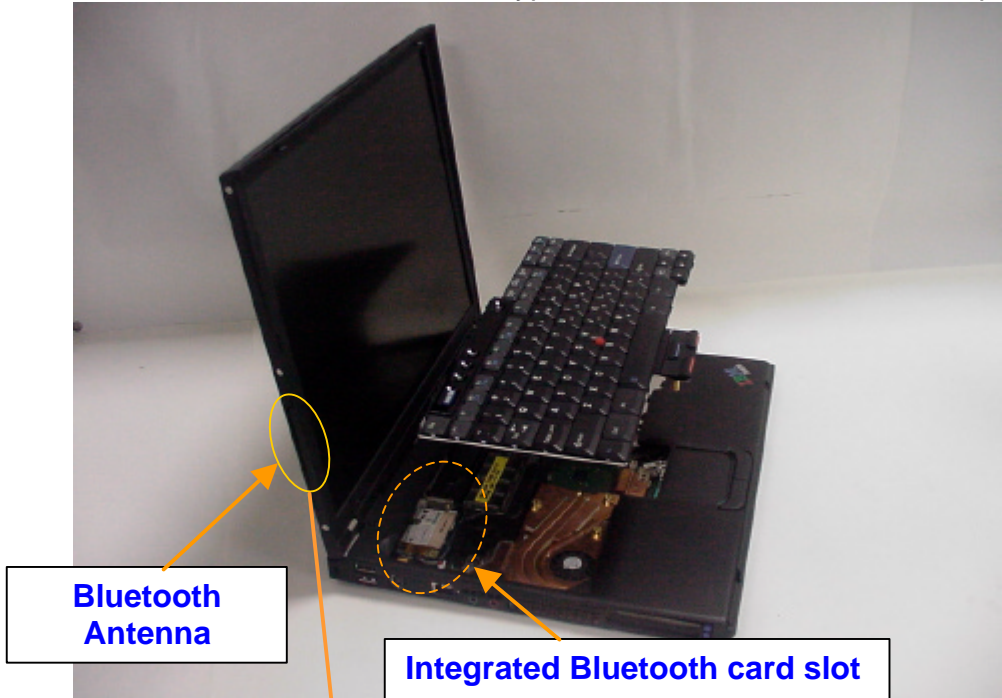
#### IBM ThinkPad X40 Series

| Designator<br>(Parts Number)        | Manufacture                                  | Antenna type               | Cable type<br>and length | Gain (dBi)<br>Note 1)      |
|-------------------------------------|--|----------------------------|--------------------------|----------------------------|
| Bluetooth antenna<br><b>13N5744</b> | <b>Nissei Electric Co.,<br/>Ltd. (Japan)</b> | <b>Meander<br/>Antenna</b> | <b>coax<br/>341mm</b>    | <b>1.99 dBi<br/>(peak)</b> |

## 2. Host PC Information and antenna location

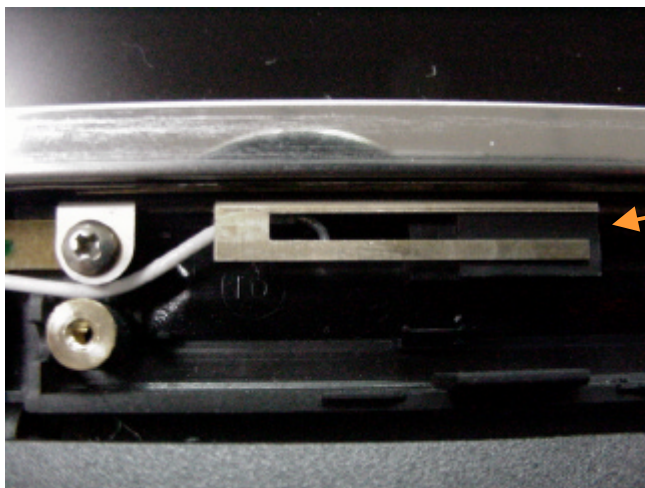
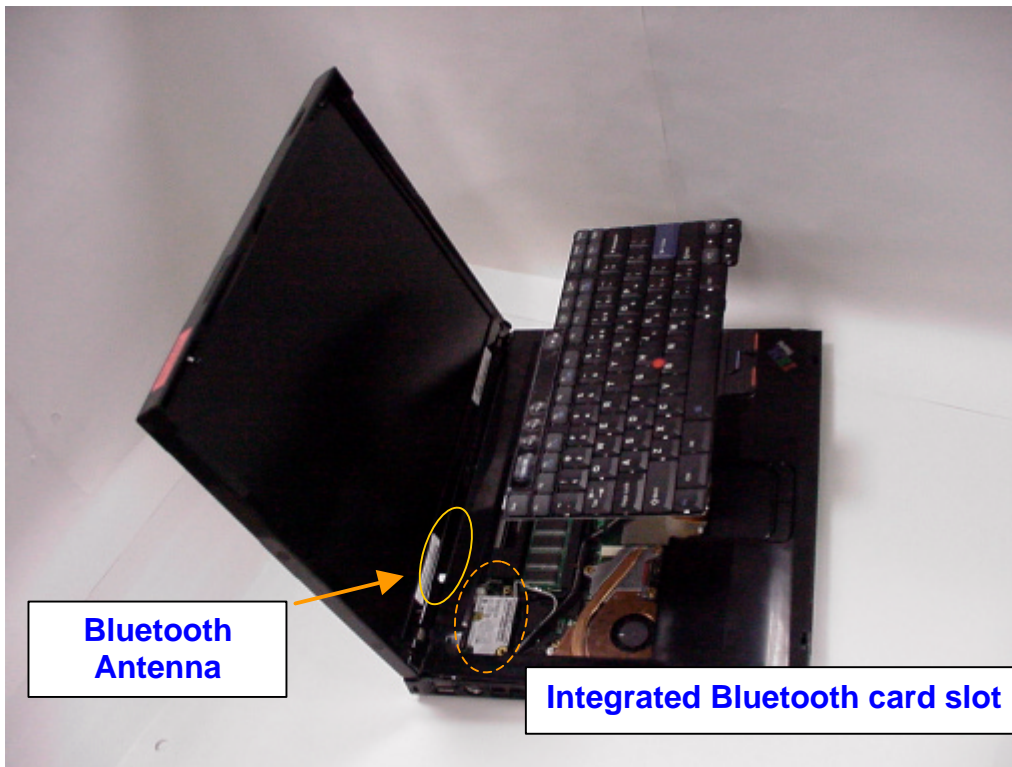
### IBM ThinkPad T40 Series, LCD 14 inch model

The Bluetooth antenna, Meander type, is built in the left side of LCD panel.



**IBM ThinkPad T40 Series, LCD 15 inch model,  
IBM ThinkPad R50 Series, LCD 14 and 15 inch model**

The Bluetooth antenna, Meander type, is built in the left side hinge section of main body.

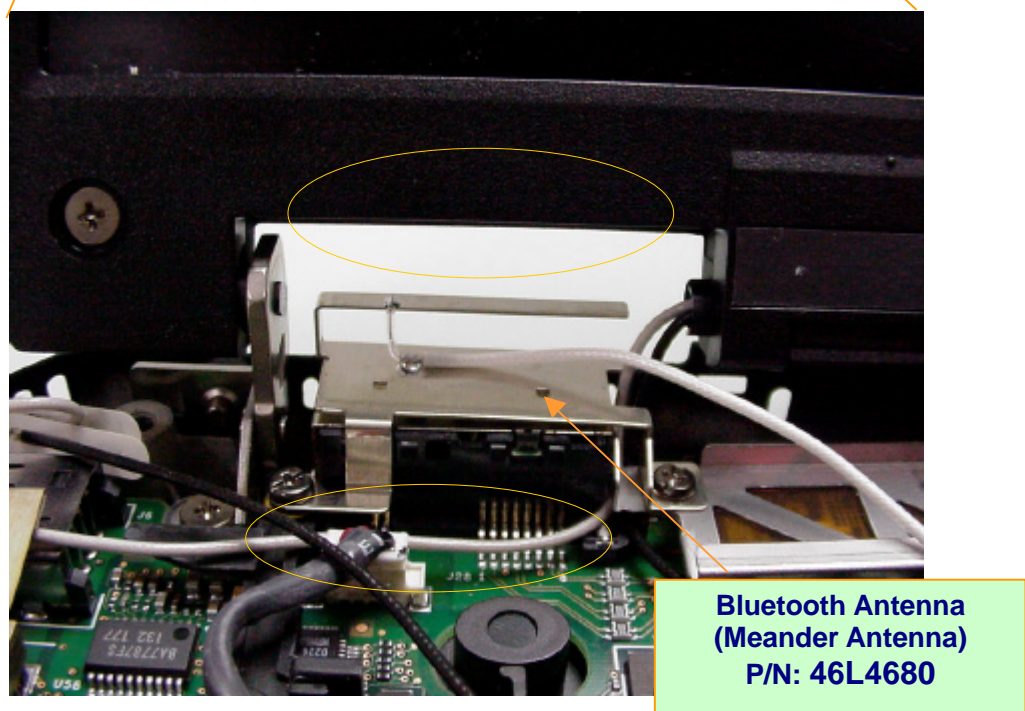
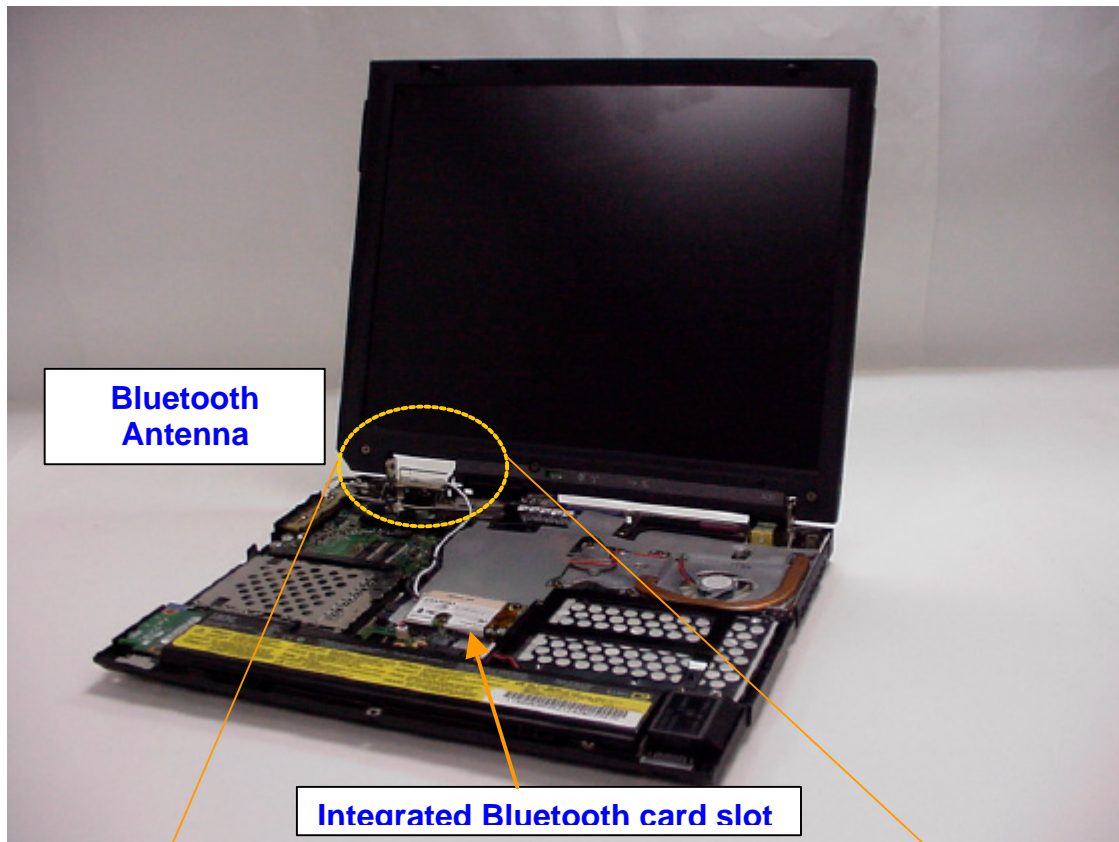


**R50 14/15 inch  
Bluetooth Antenna  
(Meander Antenna)  
P/N: 91P6817**



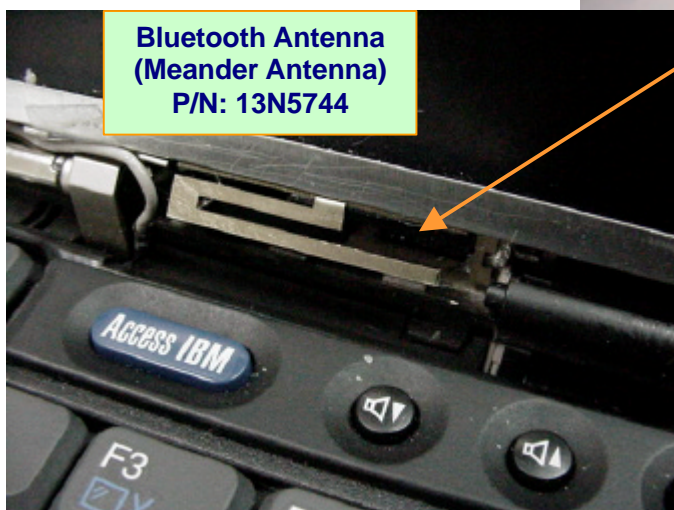
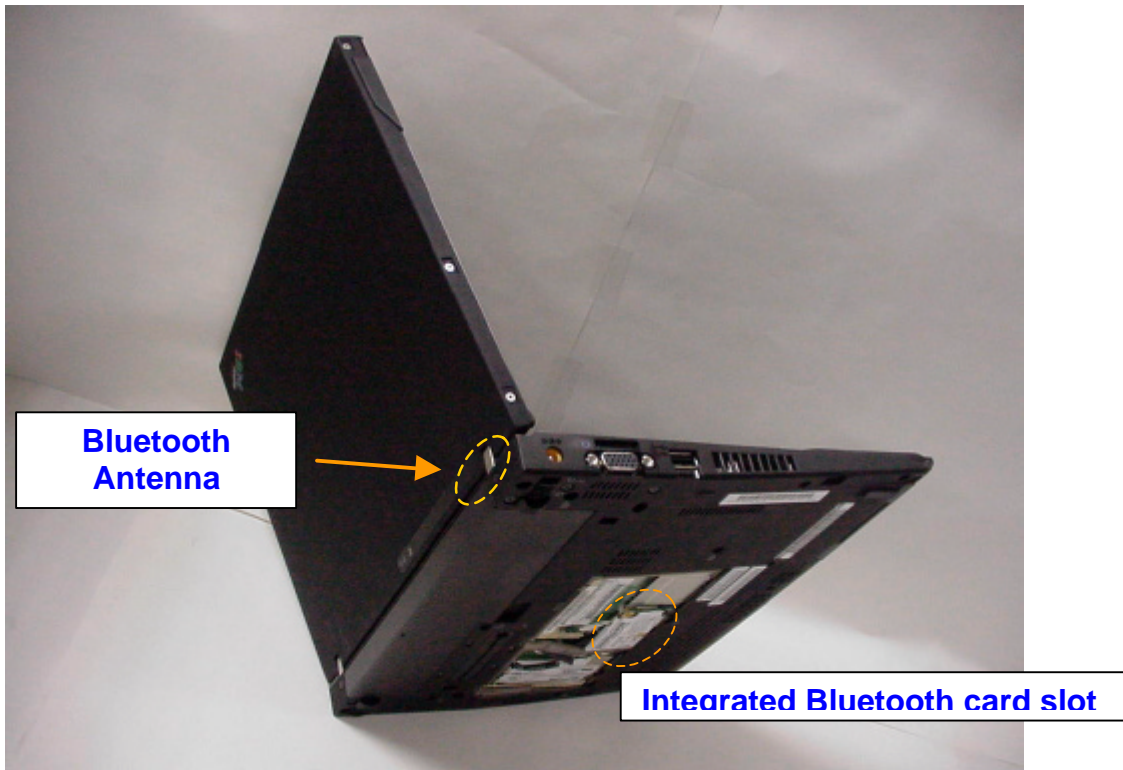
### IBM ThinkPad X30 Series

The Bluetooth antenna, Meander type, is built in the left side hinge section of main body.



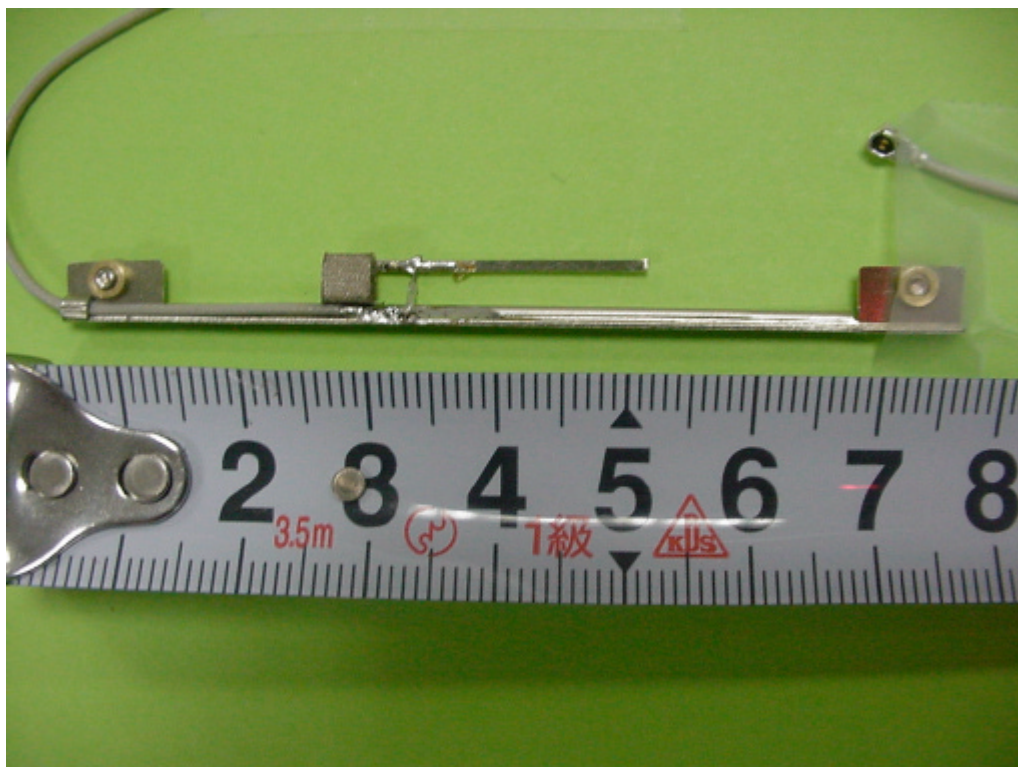
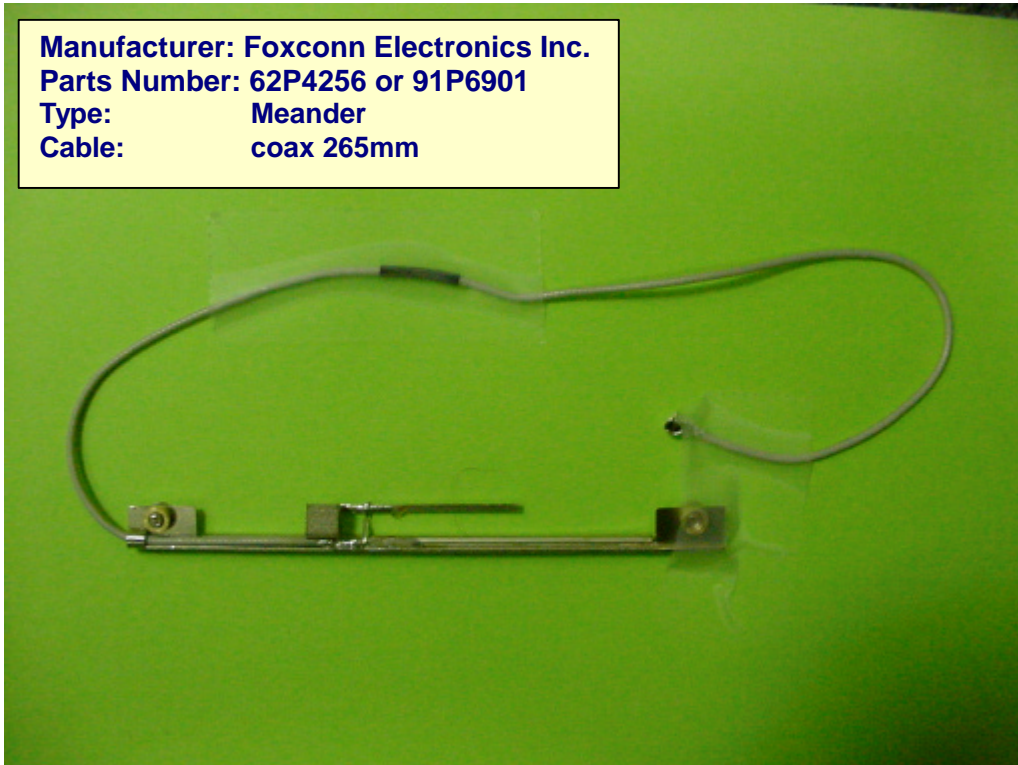
### IBM ThinkPad X40 Series

The Bluetooth antenna, Meander type, is built in the left side hinge section of main body.

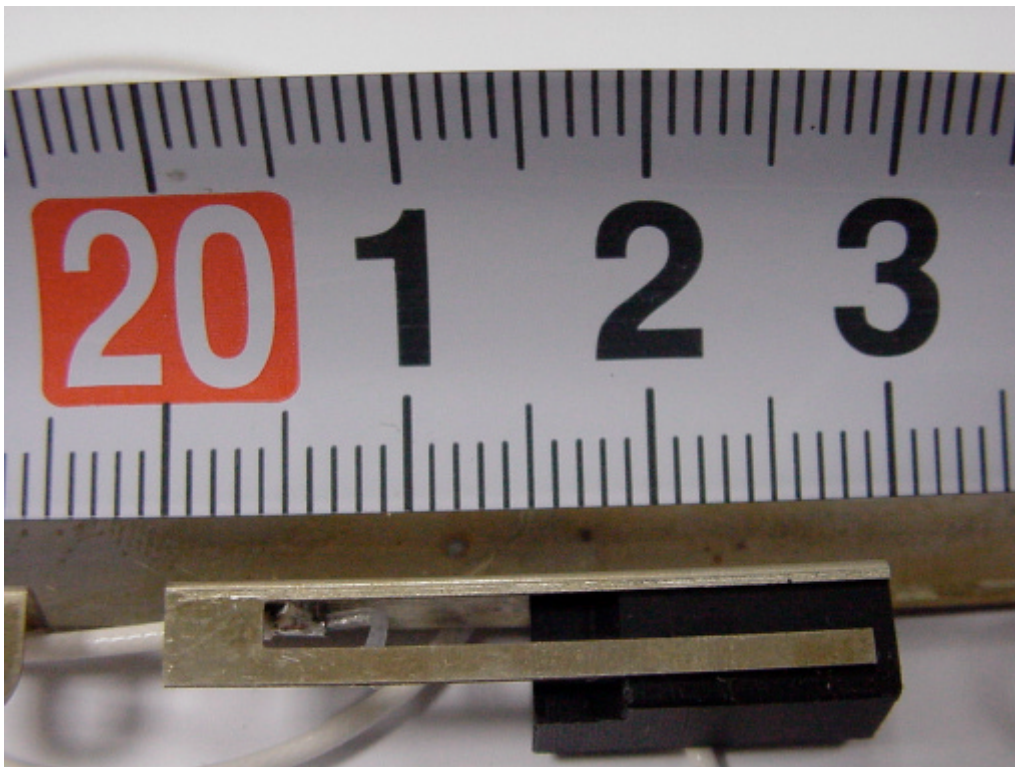
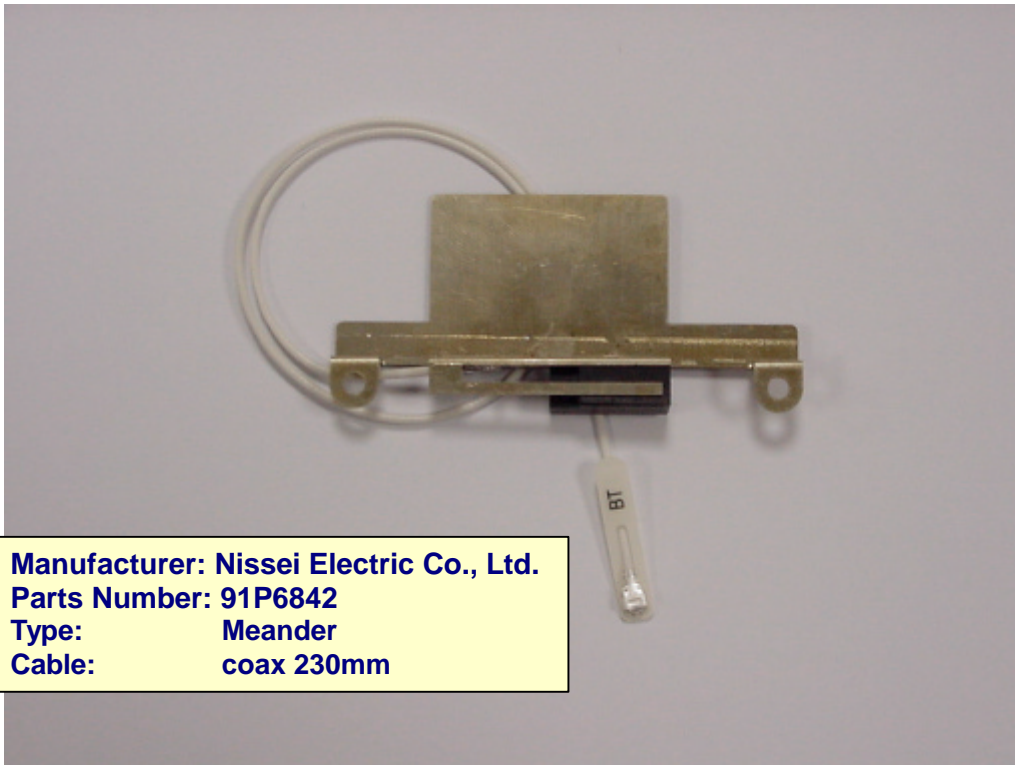


### 3. Exterior Photos of Antennas

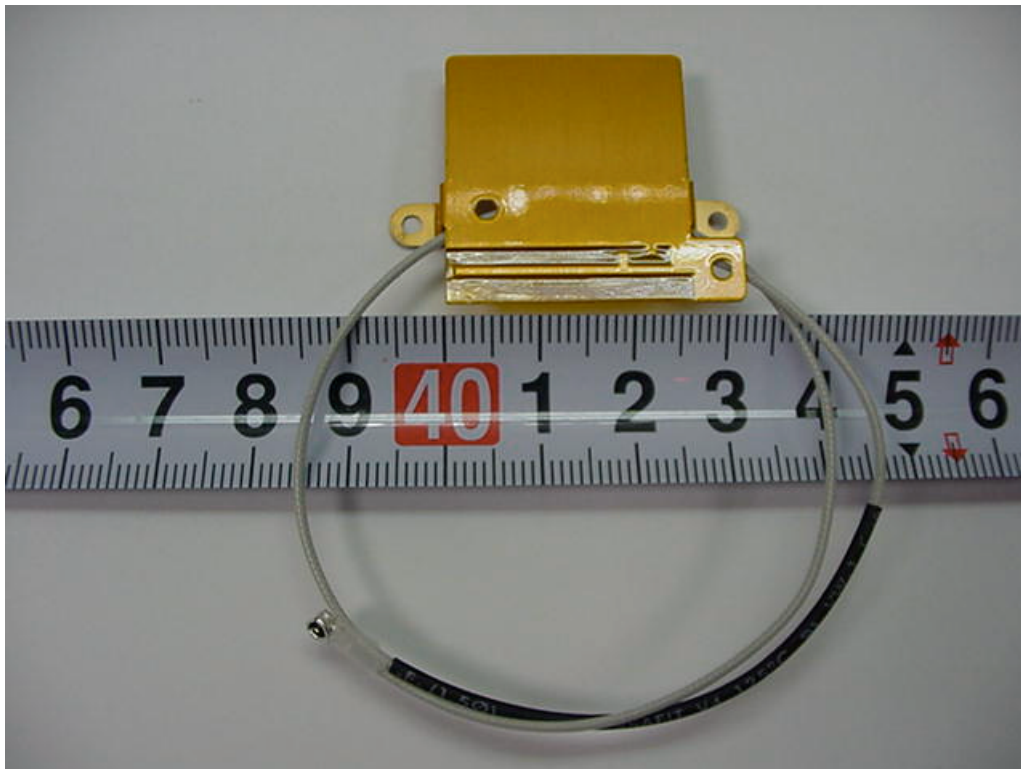
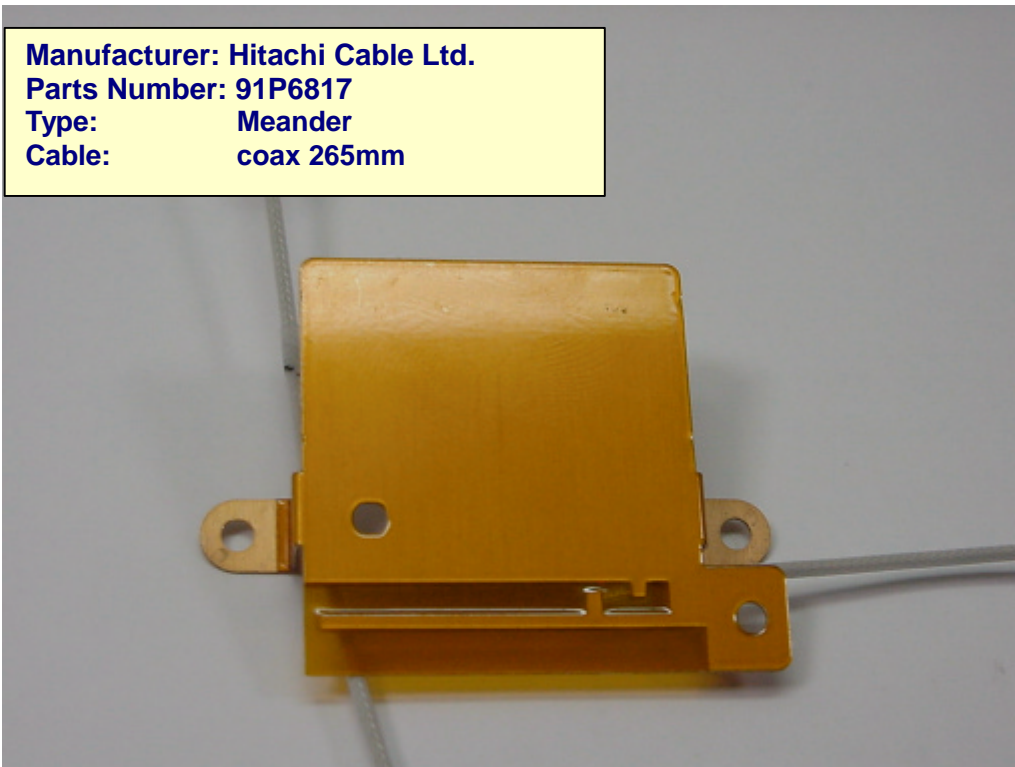
IBM ThinkPad T40 Series, LCD 14 inch model



**IBM ThinkPad T40 Series, LCD 15 inch model**

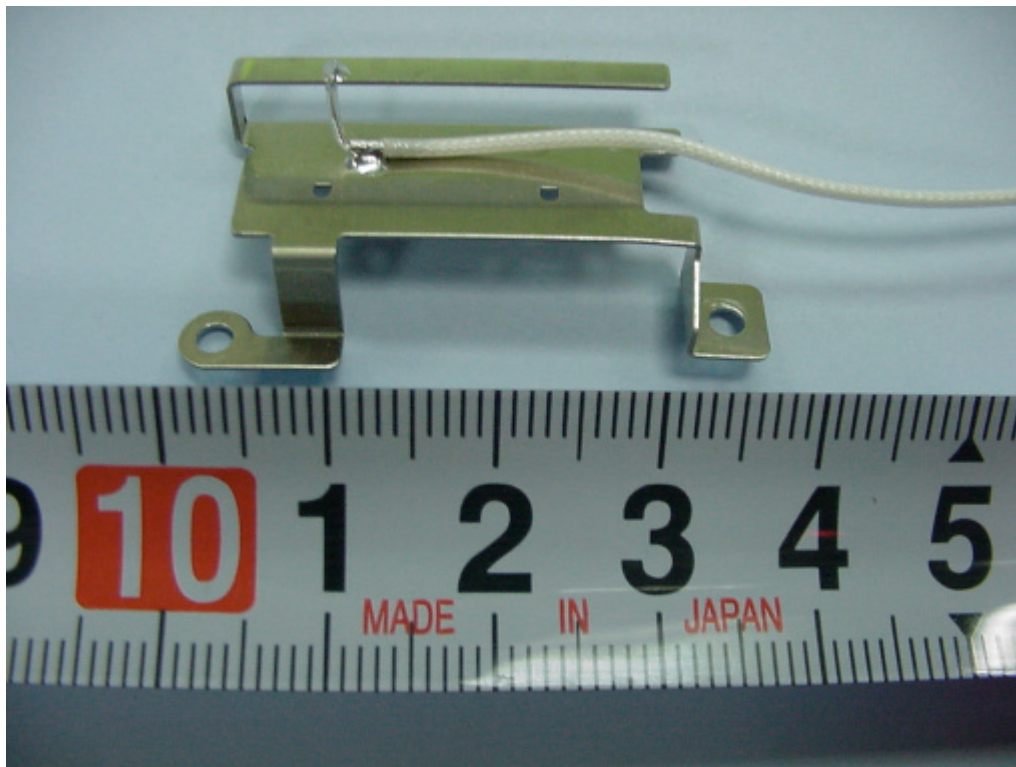
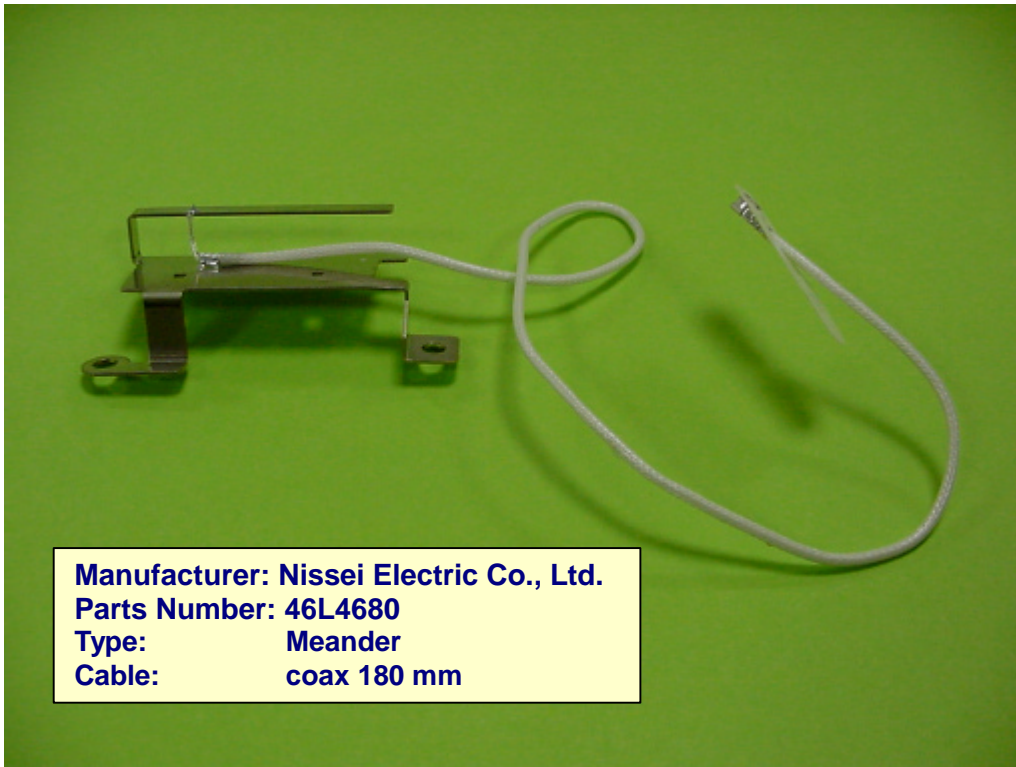


**IBM ThinkPad R50 Series, LCD 14/15 inch model**





### IBM ThinkPad X30 Series



### IBM ThinkPad X40 Series

