

# "High Frequency Ceramic Solutions"

## 1.905 GHz Antenna

P/N 1905AT45A0050

Detail Specification: 07/29/2010

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Recommended application: DECT

### General Specifications

|                 |                          |
|-----------------|--------------------------|
| Part Number     | 1905AT45A0050            |
| Frequency Range | 1880 - 1930MHz           |
| Peak Gain       | 0.5 dBi typ (XZ-Total)   |
| Average Gain    | -1.1 dBi typ. (XZ-Total) |
| Return Loss     | 9.5 dB min.              |

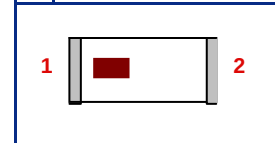
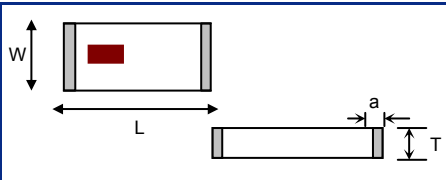
|                       |                                              |
|-----------------------|----------------------------------------------|
| Input Power           | 2W max.                                      |
| Impedance             | 50 $\Omega$                                  |
| Reel Quantity         | 1,000                                        |
| Operating Temperature | -40 to +85°C                                 |
| Storage Temperature   | +5 to +35°C, Humidity: 45-75%RH, 12 mos. Max |

|               |                   |            |                        |                           |
|---------------|-------------------|------------|------------------------|---------------------------|
| P/N<br>Suffix | Packaging Style   | Bulk       | Suffix = S             | Eg. 1905AT45A0050S        |
|               |                   | T & R      | Suffix = E             | Eg. 1905AT45A0050E        |
|               | Termination Style | 100% Tin   | Suffix = None          | Eg. 1905AT45A0050(E or S) |
|               |                   | Tin / Lead | Please consult Factory |                           |

| Terminal Configuration |               |
|------------------------|---------------|
| No.                    | Function      |
| 1                      | Feeding Point |
| 2                      | NC            |

### Mechanical Dimensions

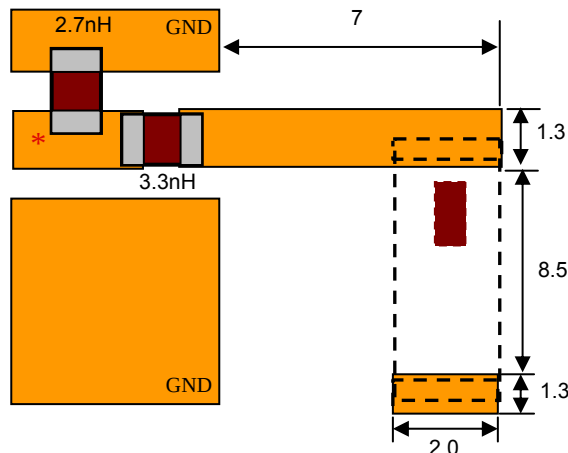
|   | In                       | mm                  |
|---|--------------------------|---------------------|
| L | 0.374 $\pm$ 0.008        | 9.50 $\pm$ 0.20     |
| W | 0.079 $\pm$ 0.008        | 2.00 $\pm$ 0.20     |
| T | 0.047 $\pm$ 0.004/-0.008 | 1.20 $\pm$ 0.1/-0.2 |
| a | 0.020 $\pm$ 0.012        | 0.50 $\pm$ 0.30     |



### Mounting Considerations

Mount these devices with brown mark facing up. Units: mm

\* Line width should be designed to provide 50  $\Omega$  impedance, depending on PCB material and thickness.



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4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

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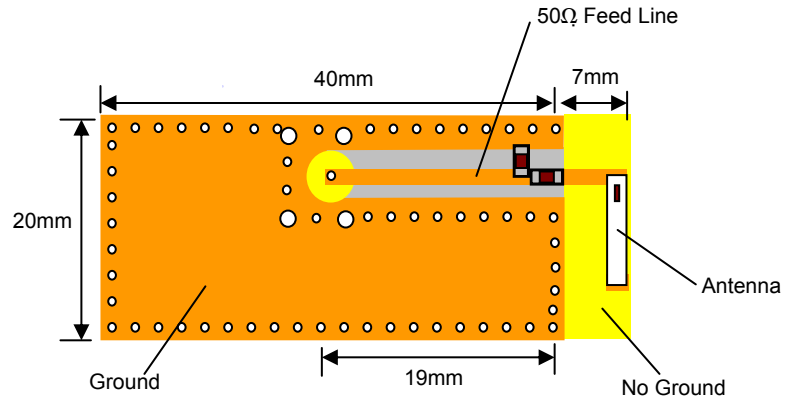
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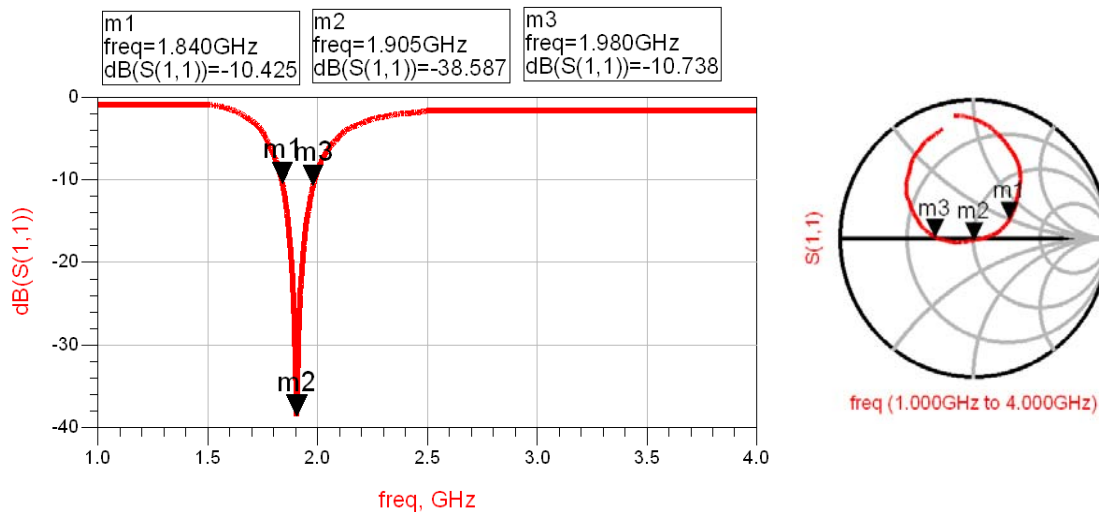
### Typical Electrical Characteristics (T=25°C)

#### Test Board



#### Return Loss

a) With matching circuits for 1880~1930MHz



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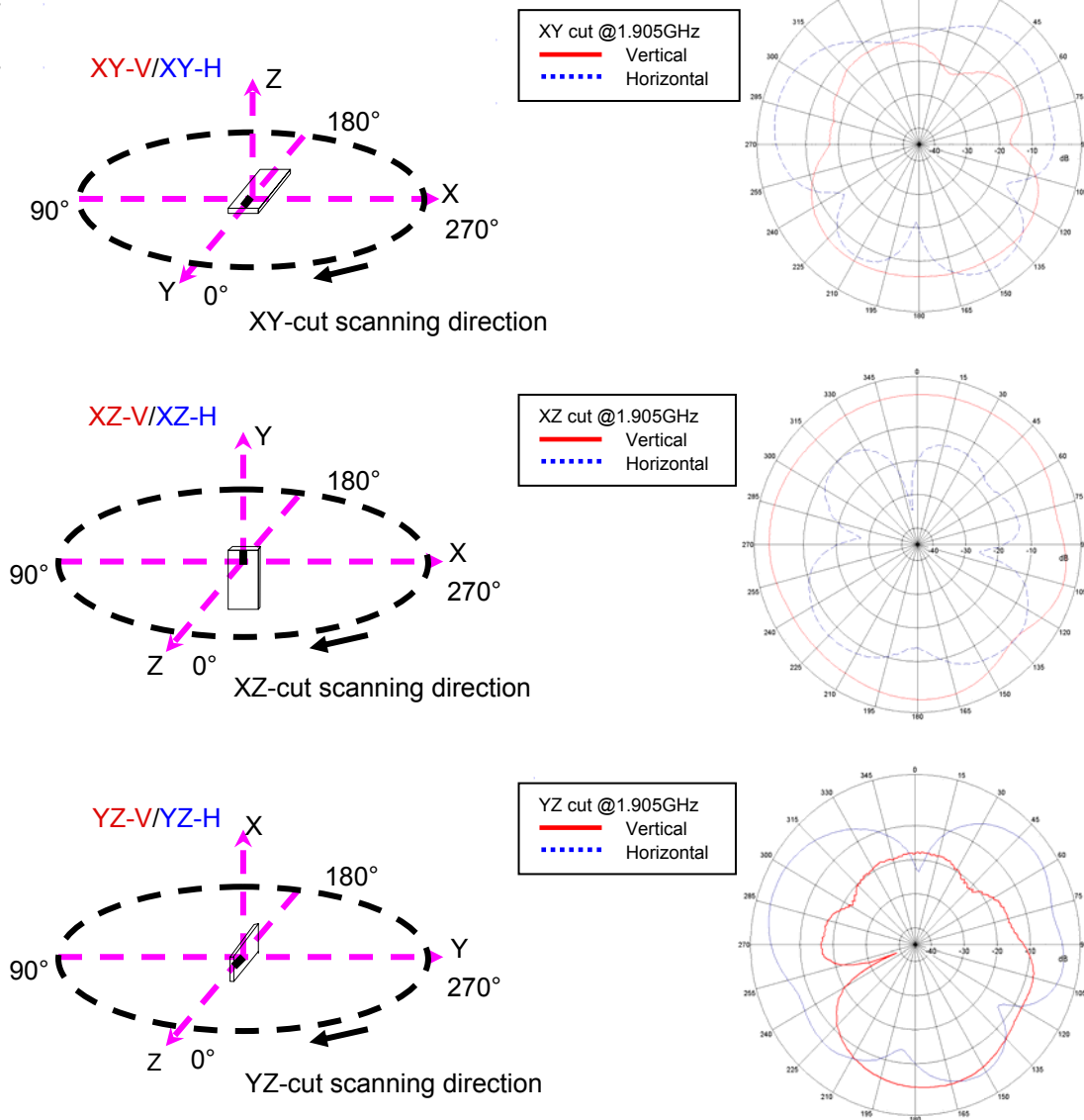
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### Typical Radiation Patterns



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