

# "High Frequency Ceramic Solutions"

## 2.45 GHz Antenna

P/N 2450AT42A100

Detail Specification: 01/25/2012

Page 1 of 3

### General Specifications

|                 |                    |
|-----------------|--------------------|
| Part Number     | 2450AT42A100       |
| Frequency Range | 2400 - 2500 Mhz    |
| Peak Gain       | 0 dBi typ. (XZ-V)  |
| Average Gain    | -1 dBi typ. (XZ-V) |
| Return Loss     | 9.5 dB min.        |

|                 |              |
|-----------------|--------------|
| Input Power     | 3 Watts max. |
| Impedance       | 50 $\Omega$  |
| Operating Temp. | -40 to +85°C |
| Reel Quantity   | 2,000        |

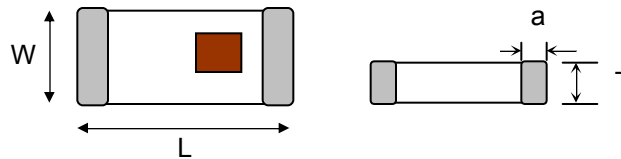
|        |                   |                     |               |                          |
|--------|-------------------|---------------------|---------------|--------------------------|
| P/N    | Packaging Style   | Bulk                | Suffix = S    | Eg. 2450AT42A100S        |
|        |                   | T & R               | Suffix = E    | Eg. 2450AT42A100E        |
| Suffix | Termination Style | 100% Tin            | Suffix = None | Eg. 2450AT42A100(E or S) |
|        | Evaluation Board  | 2450AT42A100-EB1SMA |               |                          |

### Terminal Configuration

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

### Mechanical Dimensions

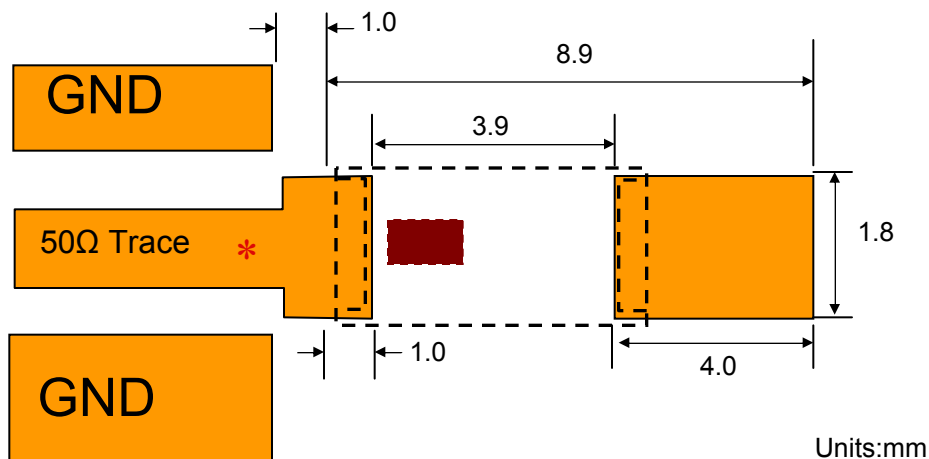
|   | In                | mm              |
|---|-------------------|-----------------|
| L | 0.197 $\pm$ 0.008 | 5.00 $\pm$ 0.20 |
| W | 0.079 $\pm$ 0.008 | 2.00 $\pm$ 0.20 |
| T | 0.043 $\pm$ 0.008 | 1.10 $\pm$ 0.20 |
| a | 0.020 $\pm$ 0.012 | 0.50 $\pm$ 0.30 |



### Mounting Considerations

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

\*Line width should be designed to provide 50 $\Omega$  impedance matching characteristics. Final mounting on customer's PCB might need a shunt-series-shunt type antenna matching circuit



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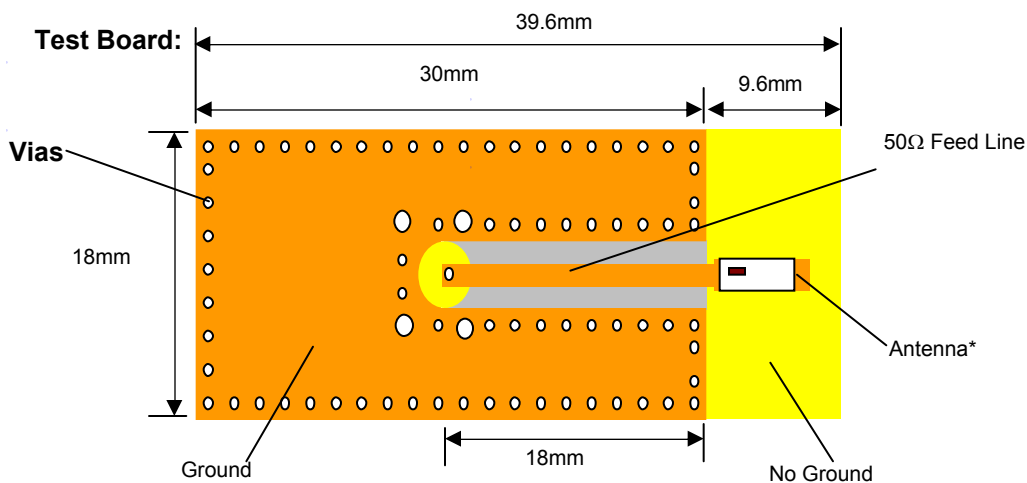
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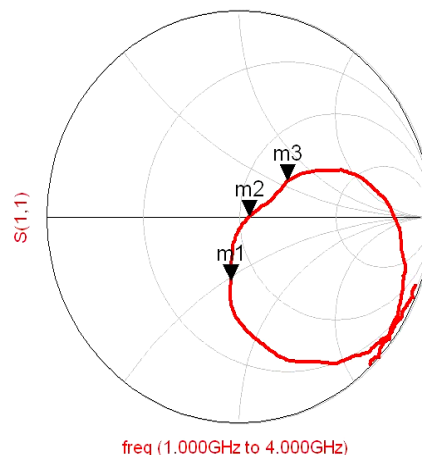
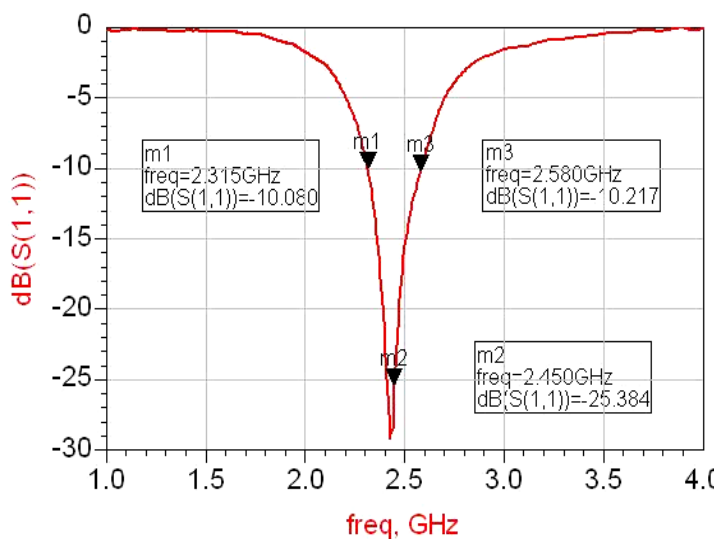
Page 2 of 3

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



### Return Loss

\*No Matching Circuit required



### Storage Conditions

+5 to +35°C, Humidity: 45-75%RH, 18 mos. Max

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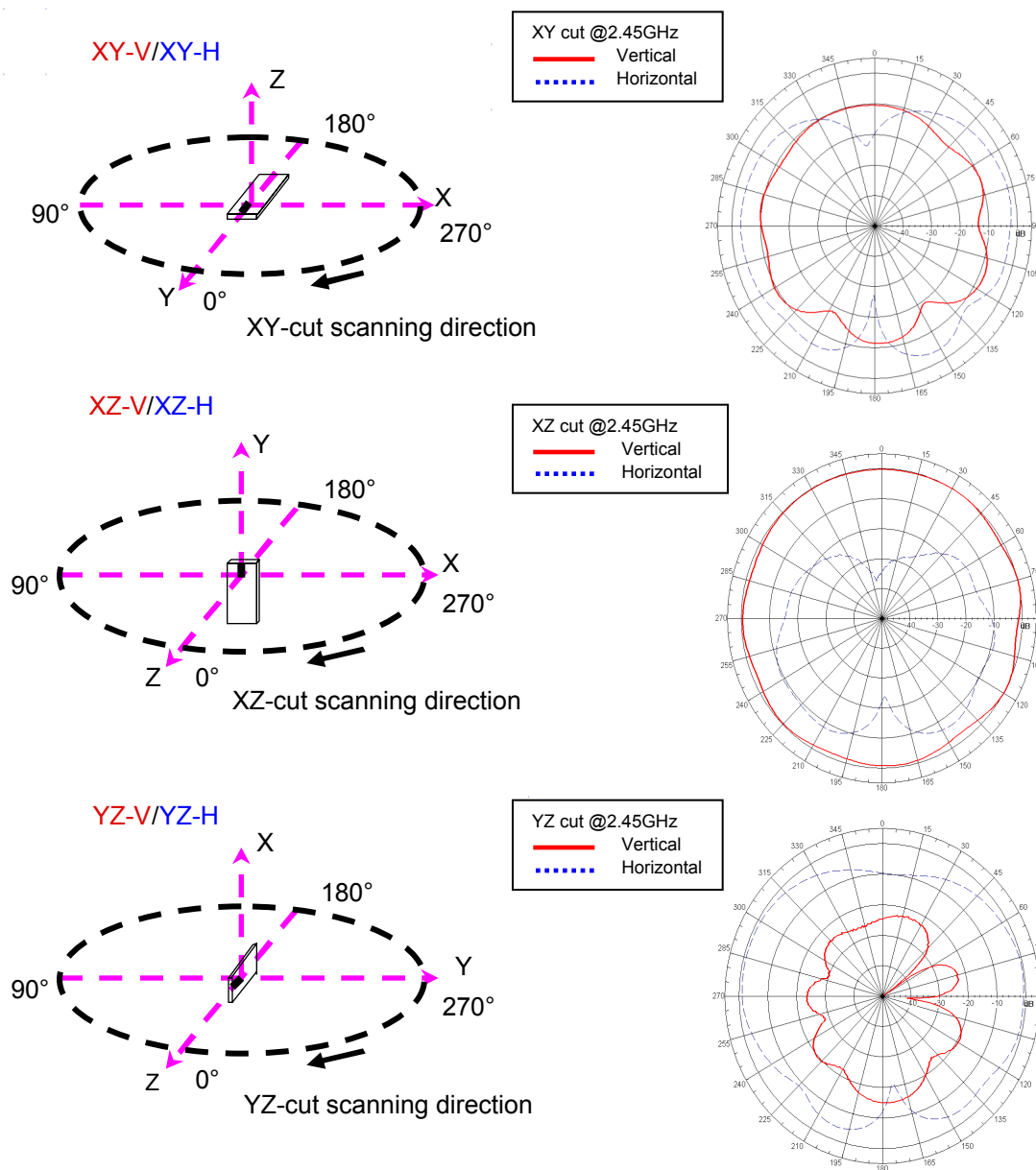
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Page 2 of 3

### Typical Radiation Patterns



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