

1608mm (0603inch) Monopole Antenna

TSA5N18D2G45NV001T

for 2.4GHz

Shapes

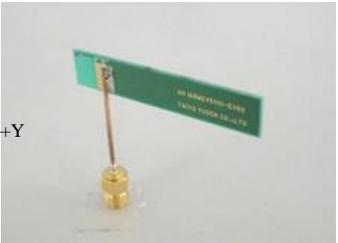
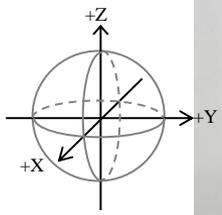
L = 1.6 ± 0.1 mm
 W = 0.8 ± 0.1 mm
 T = 0.65 mm Max



Feature

- Small size : 1608mm (0603inch)
- Low Profile : 0.65mm Max.
- Wide Bandwidth : 300MHz(VSWR<2)
- Hi Efficiency

Appearance and coordinates definition



* on TAIYO YUDEN's Evaluation Board (52 x 10 mm)

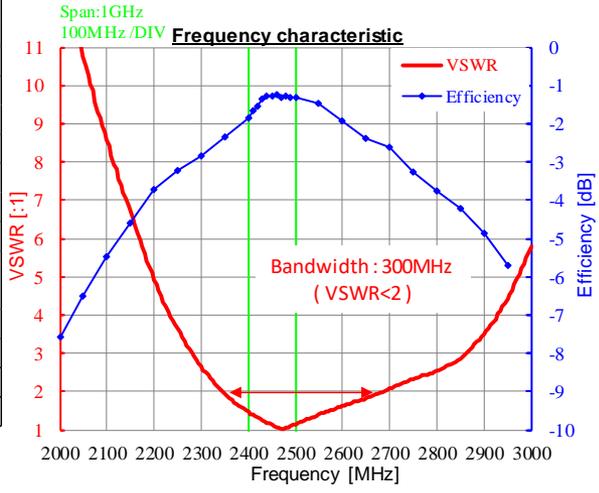
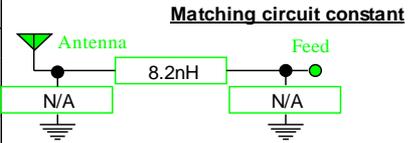
Measurement data of antenna

| Frequency [MHz] | | @2400 | @2450 | @2500 |
|---------------------------|-----------|-------|-------|-------|
| 3-plane | TX-H | 2.0 | 2.8 | 3.0 |
| | TX-V | -0.2 | -0.2 | 0.0 |
| | | 2.0 | 2.8 | 3.0 |
| Average gain [dBi] | | | | |
| XY-plane | TX-H | -4.7 | -4.2 | -4.6 |
| | TX-V | -6.4 | -6.2 | -6.4 |
| | Plus(H,V) | -2.4 | -2.1 | -2.4 |
| YZ-plane | TX-H | -3.0 | -2.5 | -2.4 |
| | TX-V | -24.7 | -22.6 | -23.3 |
| | Plus(H,V) | -2.9 | -2.4 | -2.4 |
| ZX-plane | TX-H | -8.1 | -7.3 | -7.1 |
| | TX-V | -1.5 | -1.0 | -1.0 |
| | Plus(H,V) | -0.7 | -0.1 | -0.1 |
| 3-plane | TX-H | -4.8 | -4.2 | -4.3 |
| | TX-V | -5.0 | -4.6 | -4.7 |
| | | -1.9 | -1.4 | -1.5 |
| Efficiency [dB] | | -1.8 | -1.3 | -1.3 |
| VSWR [:1] | | 1.5 | 1.1 | 1.1 |

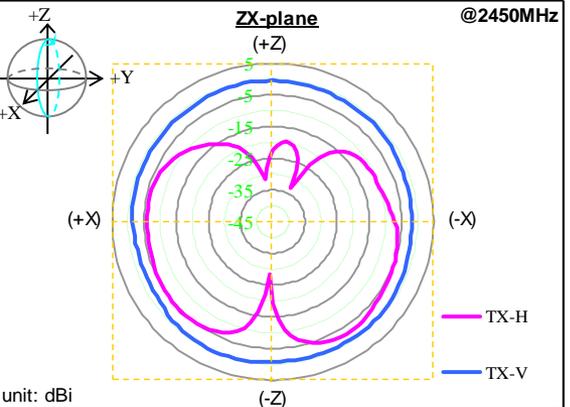
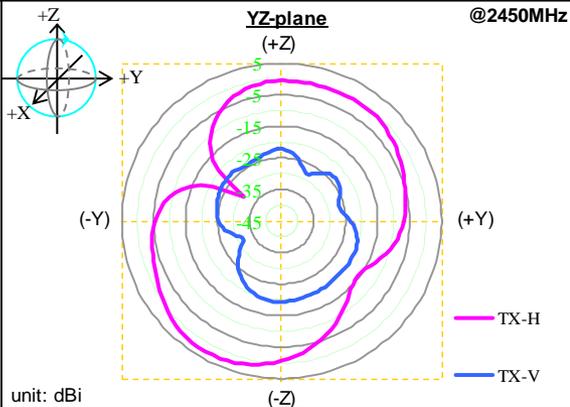
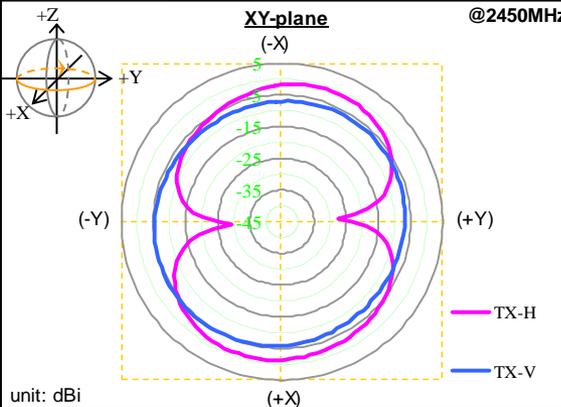
*Note: Peak gain(3-plane)=Peak(XY[H],XY[V],YZ[H])YZ[V],ZX[H])ZX[V])

*Note:The value is average value in 1 round of each inclination direction angle.

*Note: Average gain(3-plane)=Average(XY[Plus(H,V)],YZ[Plus(H,V)],ZX[Plus(H,V)])



Radiation pattern

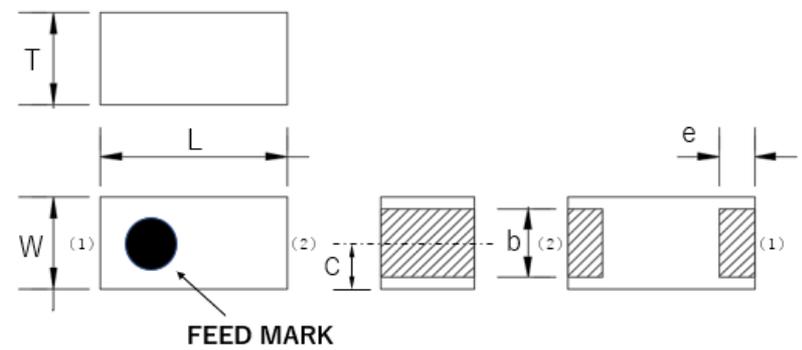


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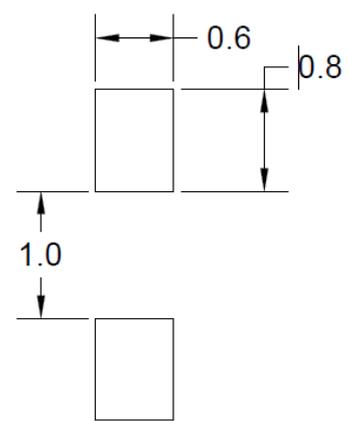
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External Dimensions



Example of Land Pattern



Unit : mm

| Code | L | W | T | b | e | C |
|------|---------|---------|---------|---------|---------|---------|
| Size | 1.6±0.1 | 0.8±0.1 | 0.65Max | 0.6±0.1 | 0.3±0.1 | 0.4±0.1 |

Unit : mm