

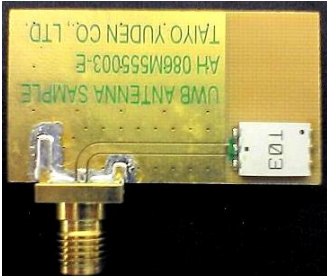
# 8 x 6 mm Wideband monopole Antenna

TSA5NA6L5G55NS003T (AH 086M555003-T)

for UWB

## Shapes

L= 8.0 ± 0.3 mm  
W= 6.0 ± 0.3 mm  
T= 1.0 ± 0.3 mm



\*on Taiyo Yuden's Evaluation Board  
( 36 x 20 mm )  
\*Element-GND Distance : 1.5 mm

## Feature

- \* Small
- \* Wide Band
- \* High Performance



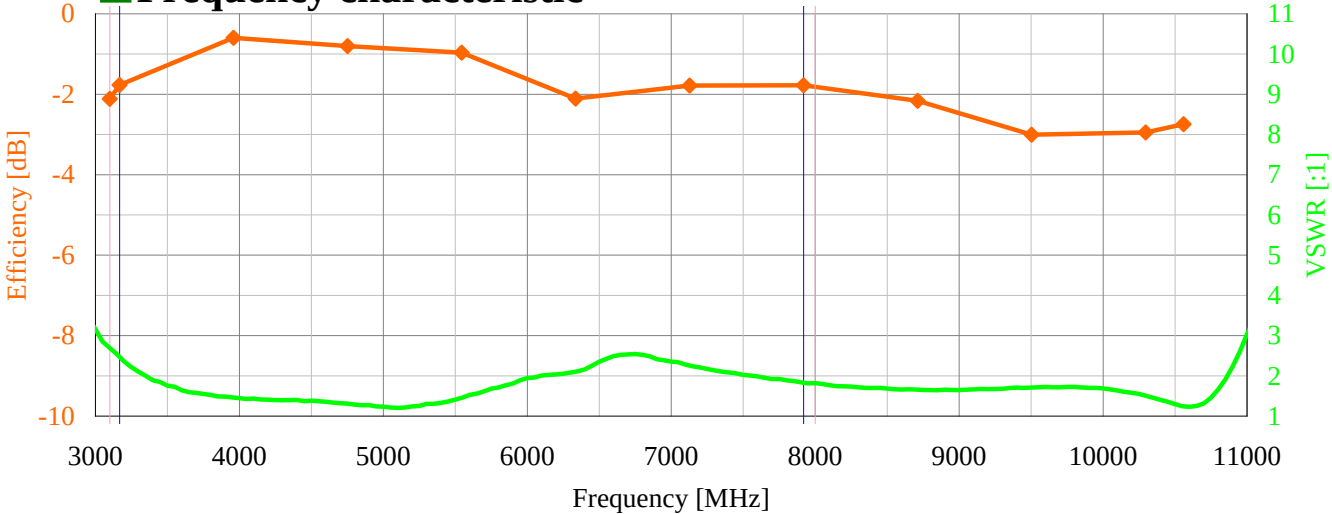
Actual data

Efficiency : -0.6 ~ -2.1dB ( 87 ~ 62% )

Peak Gain : 2.6 ~ 0.7dBi

@3168~7920MHz

## Frequency characteristic



## Electrical Characteristics

|                    |          |      | 3100MHz         | 3168MHz         | 3960MHz         | 4752MHz         | 5544MHz         | 6336MHz         | 7128MHz         | 7920MHz         | 8712MHz         | 9504MHz         | 10296MHz        | 10560MHz        |
|--------------------|----------|------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Efficiency [dB]    |          |      | -2.1<br>( 61% ) | -1.8<br>( 66% ) | -0.6<br>( 87% ) | -0.8<br>( 83% ) | -1.0<br>( 80% ) | -2.1<br>( 62% ) | -1.8<br>( 66% ) | -1.8<br>( 66% ) | -2.2<br>( 61% ) | -3.0<br>( 50% ) | -2.9<br>( 51% ) | -2.7<br>( 53% ) |
| Peak gain [dBi]    |          |      | 1.8             | 2.0             | 2.6             | 2.1             | 1.5             | 0.8             | 1.0             | 0.7             | 0.4             | -0.8            | -0.1            | 0.5             |
| Average gain [dBi] | XY-plane | TX-H | -4.1            | -4.0            | -2.1            | -2.5            | -4.3            | -6.1            | -7.0            | -6.1            | -5.6            | -4.9            | -4.7            | -4.1            |
|                    |          | TX-V | -5.5            | -5.7            | -4.3            | -3.5            | -2.7            | -3.9            | -3.3            | -2.6            | -3.3            | -7.7            | -11.7           | -12.4           |
|                    | YZ-plane | TX-H | -3.8            | -3.4            | -2.7            | -2.6            | -2.3            | -3.4            | -3.2            | -3.5            | -4.1            | -5.0            | -4.3            | -4.3            |
|                    |          | TX-V | -14.3           | -14.8           | -20.1           | -19.7           | -14.1           | -13.9           | -11.8           | -13.0           | -13.4           | -14.8           | -17.6           | -17.0           |
|                    | ZX-plane | TX-H | -9.8            | -9.5            | -8.3            | -6.5            | -5.3            | -7.5            | -7.7            | -6.8            | -6.8            | -9.7            | -14.0           | -13.8           |
|                    |          | TX-V | -1.1            | -0.7            | 0.5             | -0.9            | -2.3            | -3.5            | -2.6            | -3.6            | -3.6            | -3.2            | -2.0            | -1.6            |