

## TECHNICAL DATA

### ► Electrical Data

|                   |             |
|-------------------|-------------|
| Frequency Range   | 100~700MHz  |
| Insertion Loss    | 0.85dB max  |
| VSWR              | 1.48:1 max  |
| Isolation         | 15dB min    |
| Phase Balance     | ±5.5°       |
| Amplitude Balance | ±1.25dB max |
| Power Handling    | 500W        |

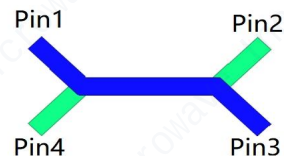
### ► Mechanical Data

|                |                                             |
|----------------|---------------------------------------------|
| Dimensions     | 86.2×50×5.5mm                               |
| Connector Type | SMD                                         |
| Surface Finish | Immersion Gold                              |
|                | -Prevent surface from oxidation and scratch |

### ► Environmental Data

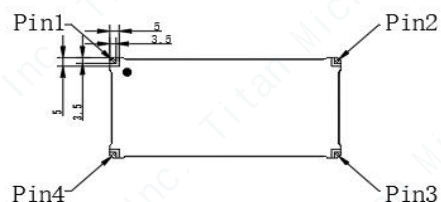
|                       |            |
|-----------------------|------------|
| Operating Temperature | -55℃~+105℃ |
|-----------------------|------------|

## Pin Configuration



| REV | DESCRIPTION OF REVISION | By     | DATE       | APPROVED |
|-----|-------------------------|--------|------------|----------|
| A   | INITIAL RELEASE         | C. Cai | 2022/11/22 | C. Chen  |

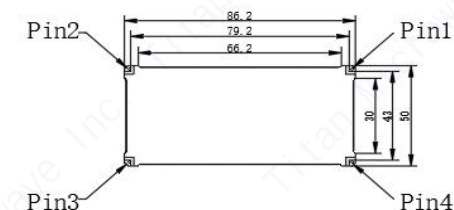
TOP VIEW



SIDE VIEW



BOTTOM VIEW



| Configurati<br>on | Pin 1      | Pin 2      | Pin 3      | Pin 4      |
|-------------------|------------|------------|------------|------------|
| <b>Splitter</b>   | Input      | Isolated   | -3dB∠θ-90° | -3dB∠θ     |
| <b>Splitter</b>   | Isolated   | Input      | -3dB∠θ     | -3dB∠θ-90° |
| <b>Splitter</b>   | -3dB∠θ-90° | -3dB∠θ     | Input      | Isolated   |
| <b>Splitter</b>   | -3dB∠θ     | -3dB∠θ-90° | Isolated   | Input      |
| <b>Combiner</b>   | A∠θ-90°    | A∠θ        | Isolated   | Output     |
| <b>Combiner</b>   | A∠θ        | A∠θ-90°    | Output     | Isolated   |
| <b>Combiner</b>   | Isolated   | Output     | A∠θ-90°    | A∠θ        |
| <b>Combiner</b>   | Output     | Isolated   | A∠θ        | A∠θ-90°    |

## Notes:

- ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME
- CUSTOMER OUTLINE DRAWING FOR REFERENCE ONLY

|                                      |
|--------------------------------------|
| DRAWN: L. Ma 22/11/22                |
| ENGINEER: J. Zhu 22/11/22            |
| APPROVED: C. Chen 22/11/22           |
| TOLERANCE UNLESS OTHERWISE SPECIFIED |
| x ±0.50 [0.019"]                     |
| .x ±0.20 [0.008"]                    |
| .xx ±0.10 [0.004"]                   |
| ANGLES ±1°                           |

## TITLE:

SMD 3dB 90° High Power  
Hybrid Coupler,  
100-700MHz, 500W

## PART No.:

TMHC0405W03



www.titan-microwave.com



DIMENSIONS IN MILLIMETERS(mm)

|             |        |               |           |
|-------------|--------|---------------|-----------|
| SIZE:<br>A4 | SCALE: | SHEET:<br>1/1 | REV:<br>A |
|-------------|--------|---------------|-----------|