

## TECHNICAL DATA

### ► Electrical Data

|                   |              |
|-------------------|--------------|
| Frequency Range   | 1000~2000MHz |
| Insertion Loss    | 0.2dB max    |
| VSWR              | 1.15:1 max   |
| Isolation         | 20dB min     |
| Phase Balance     | ±3°          |
| Amplitude Balance | ±0.5dB max   |
| Power Handling    | 100W         |

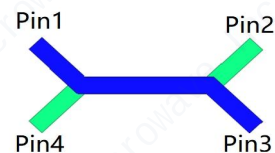
### ► Mechanical Data

|                |                                             |
|----------------|---------------------------------------------|
| Dimensions     | 14.22×5.08×2mm                              |
| Connector Type | SMD                                         |
| Surface Finish | Immersion Gold                              |
|                | -Prevent surface from oxidation and scratch |

### ► Environmental Data

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

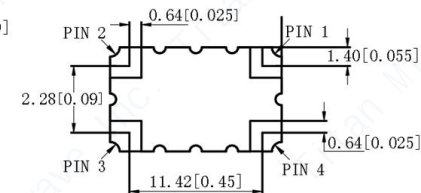
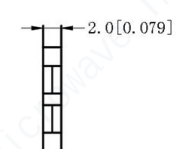
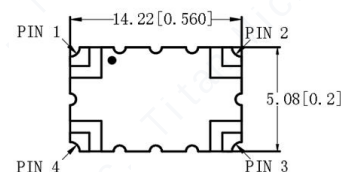
## Pin Configuration



Top View

Side View

Bottom View



| Configuration | Pin 1        | Pin 2        | Pin 3        | Pin 4        |
|---------------|--------------|--------------|--------------|--------------|
| Splitter      | Input        | Isolated     | -3dB ∠ θ-90° | -3dB ∠ θ     |
| Splitter      | Isolated     | Input        | -3dB ∠ θ     | -3dB ∠ θ-90° |
| Splitter      | -3dB ∠ θ-90° | -3dB ∠ θ     | Input        | Isolated     |
| Splitter      | -3dB ∠ θ     | -3dB ∠ θ-90° | Isolated     | Input        |
| Combiner      | A ∠ θ-90°    | A ∠ θ        | Isolated     | Output       |
| Combiner      | A ∠ θ        | A ∠ θ-90°    | Output       | Isolated     |
| Combiner      | Isolated     | Output       | A ∠ θ-90°    | A ∠ θ        |
| Combiner      | Output       | Isolated     | A ∠ θ        | A ∠ θ-90°    |

|                                      |
|--------------------------------------|
| 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,  
1000~2000MHz, 100W

## PART No.:

TMHC1500E03L



www.titan-microwave.com



DIMENSIONS IN MILLIMETERS(mm)

SIZE:  
A4

SCALE:

SHEET:  
1/1

REV:  
A

## Notes:

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