



## HT-SBTC-2-10L

5-1000MHz 50Ω 2 Way Power Divider

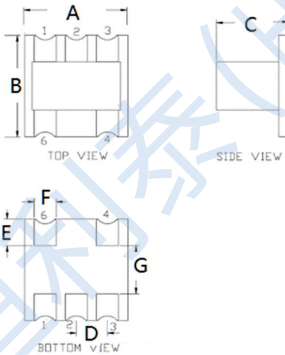
## • APPLICATIONS

- UHF/VHF receivers/transmitters and cellular.

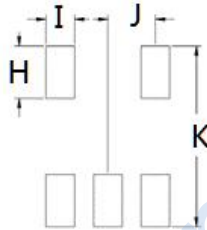
## FEATURES

- Surface mount
- 2 Way 0 degree
- 260°C reflow compatible
- RoHS compliant and Pb free
- Available on tape and reel

## DIMENSIONS



## PCB LAYOUT



| A    | B    | C    | D    | H    | I    | J    |
|------|------|------|------|------|------|------|
| 4.30 | 4.30 | 3.00 | 1.27 | 1.40 | 0.76 | 1.27 |
| E    | F    | G    |      |      |      |      |
| 0.90 | 0.90 | 2.50 |      |      |      |      |
|      |      |      |      | K    |      |      |
|      |      |      |      | 4.83 |      |      |

Unless otherwise stated dimensions are in mm

Tolerance: .xx ± 0.25, .xxx ± 0.05

## ELECTRICAL SPECIFICATIONS@25°C:

| Parameters (P#: ENA PORT)     | frequency band | Min. | Typ. | Max. | Unit |
|-------------------------------|----------------|------|------|------|------|
| Port Impedance, Z0 (P1)       |                |      | 50   |      | Ohm  |
| Insertion Loss<br>(Above 3dB) | 5 - 50MHz      |      | 0.3  | 0.7  | dB   |
|                               | 50 - 500MHz    |      | 0.4  | 0.8  | dB   |
|                               | 500 - 1000MHz  |      | 0.6  | 1.4  | dB   |
| Isolation                     | 5 - 50MHz      | 20.0 | 29.0 |      | dB   |
|                               | 50 - 500MHz    | 18.0 | 25.0 |      | dB   |
|                               | 500 - 1000MHz  | 16.0 | 23.0 |      | dB   |
| Amplitude Balance             | 5 - 50MHz      |      | 0.15 | 0.6  | dB   |
|                               | 50 - 500MHz    |      | 0.15 | 0.5  | dB   |
|                               | 500 - 1000MHz  |      | 0.15 | 0.5  | dB   |
| Phase Balance                 | 5 - 50MHz      |      | 0.2  | 3    | Deg  |
|                               | 50 - 500MHz    |      | 0.4  | 3    | Deg  |
|                               | 500 - 1000MHz  |      | 0.9  | 5    | Deg  |

## FUNCTIONAL SCHEMATIC



## PIN CONFIGURATION

| Pin No. | Function |
|---------|----------|
| 1       | Ground   |
| 2       | Ground   |
| 3       | Output 1 |
| 4       | Output 2 |
| 5       | NA       |
| 6       | Input    |

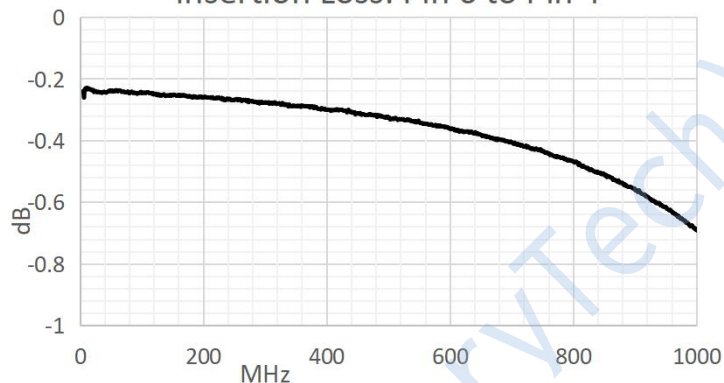
## ABSOLUTE MAXIMUM RATINGS

| Parameter                   | Value        |
|-----------------------------|--------------|
| Input RF Power              | 0.5W Max     |
| Internal Load Dissipation   | 0.125W Max   |
| Operating Temperature Range | -40 to 85°C  |
| Storage Temperature         | -55 to 100°C |

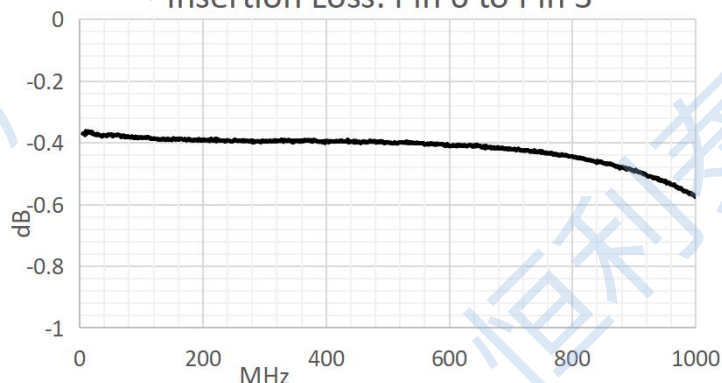


TEST CURVE

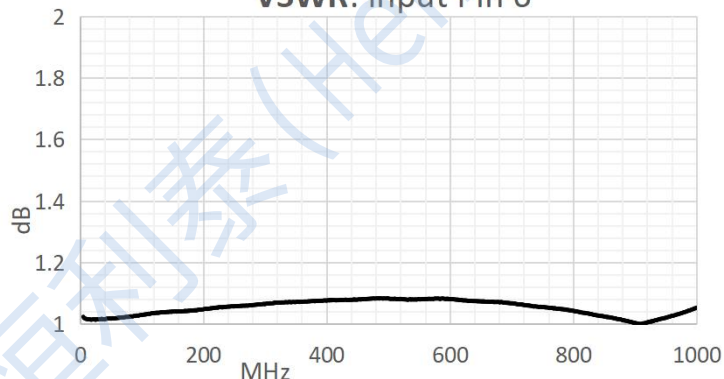
Insertion Loss: Pin 6 to Pin 4



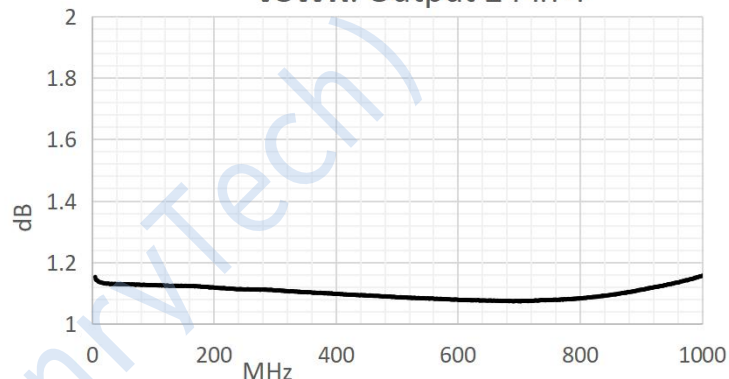
Insertion Loss: Pin 6 to Pin 3



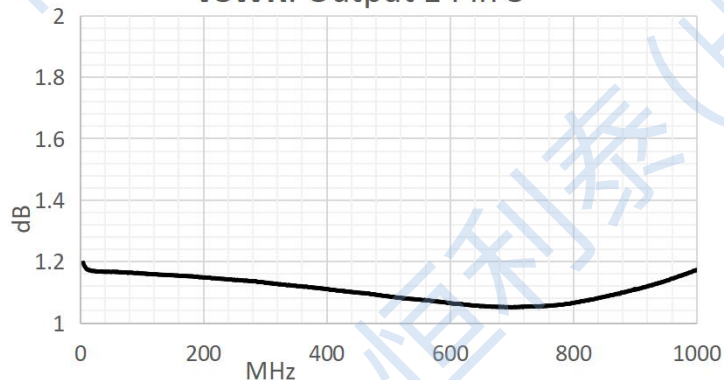
VSWR: Input Pin 6



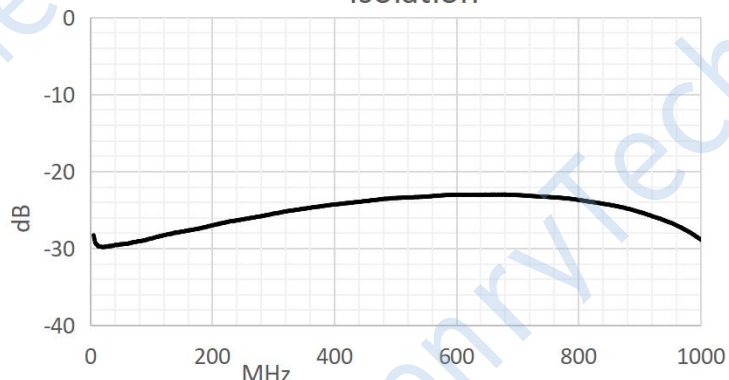
VSWR: Output 2 Pin 4



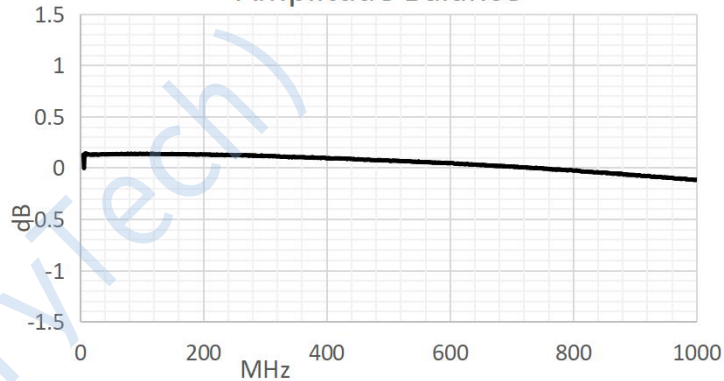
VSWR: Output 1 Pin 3



Isolation



Amplitude Balance



Phase Balance

