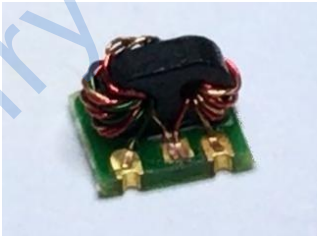
HenryTech

# Power Splitter/Combiner

## HT-SBTC-2-10L

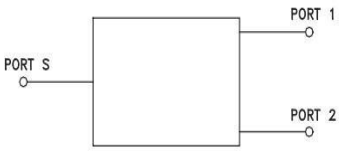
### Features
- wideband, 5 to 1000 MHz
- excellent amplitude unbalance, 0.1 dB typ.
- very good phase unbalance, 1.0 deg. typ.
- external resistor & capacitor required
- aqueous washable
- leads for excellent solderability
- low cost

### Applications
- cellular
- VHF/UHF
- communications systems



**2 Way-0° 50Ω 5 to 1000 MHz**

electrical schematic



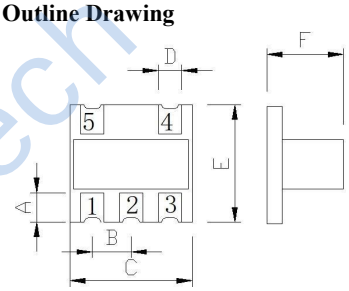

### Transformer Electrical Specifications

| Freq. range (MHz) | Isolation(dB) min | Isolation(dB) max | Insertion Loss (dB) Above 4.8 dB. min | Insertion Loss (dB) Above 4.8 dB. max | Phase Unbalance (Degrees) Max. | Amplitude Unbalance(dB) Max. |
|---|---|---|---|---|---|---|
| 5~1000 | 16 | 25 | 0.3 | 1.5 | 5 | 0.6 |

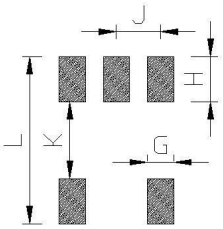
### Typical Performance Data(TEST CONDITIONS: INPUT POWER = 0dBm @Temperature = +25°C)

| Freq.(MHz) | Total Loss (dB) S-1 | Total Loss (dB) S-2 | Amp. Unbal. (dB) | Isolation(dB) | PhaseUnbal. (deg.) | VSWRS S | VSWRS 1 | VSWRS 2 |
|---|---|---|---|---|---|---|---|---|
| 5.0 | -3.10 | -3.24 | 0.14 | -30.0 | 0.15 | 1.02 | 1.10 | 1.14 |
| 10.0 | -3.11 | -3.24 | 0.13 | -28.8 | 0.09 | 1.02 | 1.10 | 1.14 |
| 50.0 | -3.13 | -3.28 | 0.14 | -28.3 | 0.09 | 1.03 | 1.10 | 1.13 |
| 100.0 | -3.15 | -3.29 | 0.14 | -26.3 | 0.10 | 1.03 | 1.03 | 1.11 |
| 200.0 | -3.19 | -3.33 | 0.14 | -22.9 | 0.24 | 1.05 | 1.05 | 1.10 |
| 300.0 | -3.27 | -3.40 | 0.13 | -21.9 | 0.45 | 1.07 | 1.07 | 1.06 |
| 500.0 | -3.37 | -3.48 | 0.11 | -21.5 | 0.71 | 1.09 | 1.09 | 1.02 |
| 800.0 | -3.46 | -3.58 | 0.09 | -21.4 | 0.98 | 1.09 | 1.09 | 1.08 |
| 1000.0 | -3.63 | -3.70 | 0.07 | -21.2 | 1.29 | 1.08 | 1.16 | 1.18 |

### Outline Drawing




### PCB Land Pattern




### Outline Dimensions ( mm)

| | | | |
|---|---|---|---|
| A | 1.00 | N | - |
| B | 1.27 | M | - |
| C | 4.20 | P | - |
| D | 0.76 | J | 1.27 |
| E | 4.08 | K | 2.21 |
| F | 2.90 | L | 4.81 |
| G | 0.76 | H | 1.30 |
| WT | 0.06 | | |

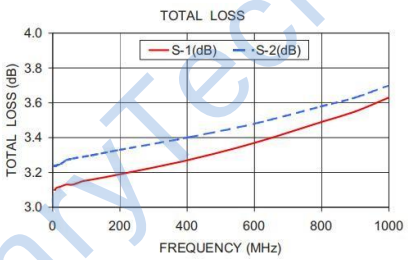
NOT:Unmarked tolerance dimension ± 0.15mm

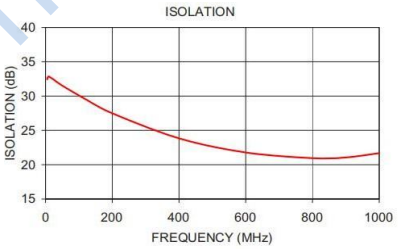
| Pin Connections | |
|---|---|
| SUM PORT | 4（input） |
| PORT 1 | 5（output1） |
| PORT 2 | 1（output2） |
| GND | 2，3 |

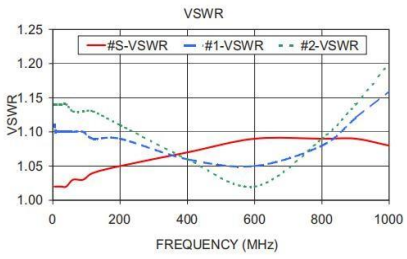
### Maximum Ratings

| | |
|---|---|
| Operating Temperature | -40°C to 85°C |
| Storage Temperature | -55°C to 100°C |
| Power Input (as a splitter) | 0.5W max. |
| Internal Dissipation | 0.3W max. |

Permanent damage may occur if any of these limits are exceeded.

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