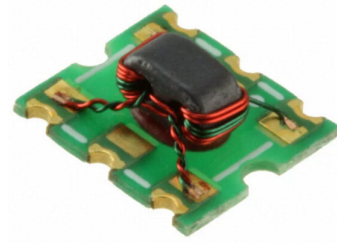


# RF Directional Coupler

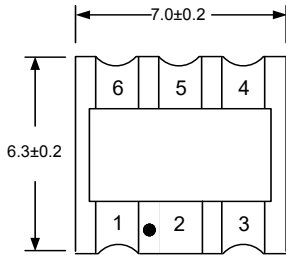
## ECJ1701-C001023

2021-05-07 Rev. 0

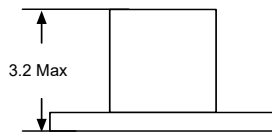


### 75Ω 17dB Directional Coupler 5-1000MHz

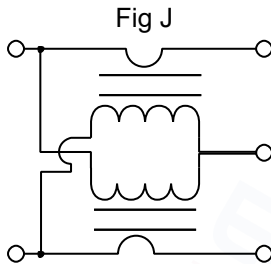
#### Outline Drawing(mm)



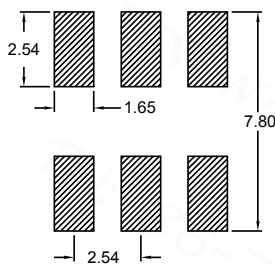
Top View



#### Electrical structure



#### Recommended layout(mm)



#### Pin Connections

|               |   |
|---------------|---|
| Input         | 6 |
| Coupling      | 4 |
| Output        | 1 |
| Ground        | 2 |
| External 75 Ω | 3 |

#### Features

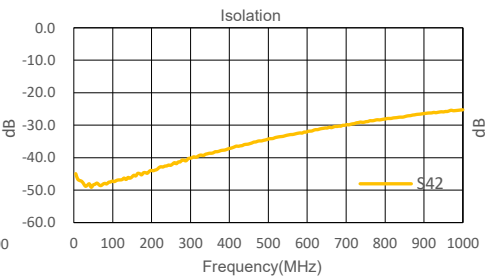
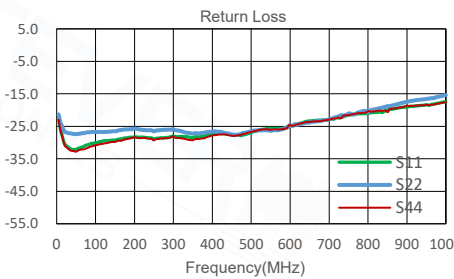
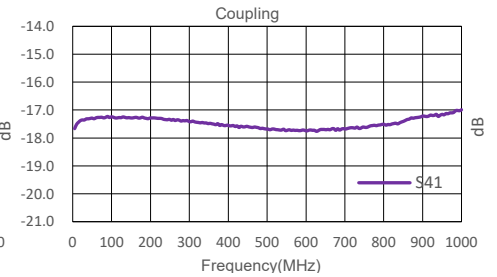
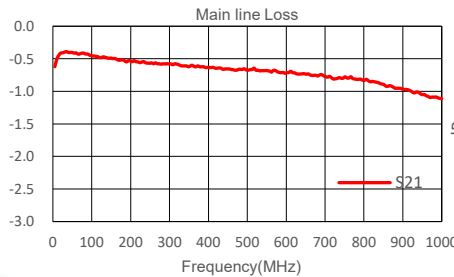
- Operating temperature range: -40 °C to +85 °C
- Storage temperature range: -55 °C to +100 °C
- 260°C Reflow Compatible
- RoHS compliant and lead free
- Input Power:250 mW
- DC Current:30 mA

#### Applications

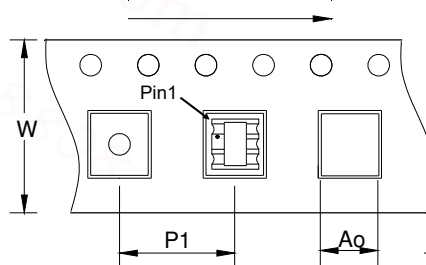
It offers low loss, good Iso-lation, good input/output matching and exceptional coupling repeatability. Ideally suited for high volume CATV/Broadband applications.

#### Electrical Specifications:TA=25°C, 0dBm, Z0=75Ω

| Parameter                 | Test Conditions | Units | Min  | Typ  | Max  |
|---------------------------|-----------------|-------|------|------|------|
| Coupling(S41)             | 5-1000MHz       | dB    | 16.5 | 17.3 | 18.0 |
| Main line Loss(S21)       | 5-1000MHz       | dB    | —    | 1.0  | 1.4  |
| Input Return Loss(S11)    | 5-1000MHz       | dB    | 16.0 | 28.0 | —    |
| Coupling Return Loss(S44) | 5-1000MHz       | dB    | 16.0 | 28.0 | —    |
| Output Return Loss(S22)   | 5-1000MHz       | dB    | 15.0 | 25.0 | —    |
| Isolation(S42)            | 5-1000MHz       | dB    | 22.0 | 40.0 | —    |



#### Carrier Tape Orientation



#### Tape & Reel Information

| Parameter    | Units | Value |
|--------------|-------|-------|
| Qty per reel | PCS   | 1500  |
| Reel Size    | mm    | 330   |
| Tape Width   | mm    | 16.00 |
| Pitch        | mm    | 12.00 |
| Ao           | mm    | 7.20  |
| Bo           | mm    | 8.10  |
| Ko           | mm    | 4.00  |