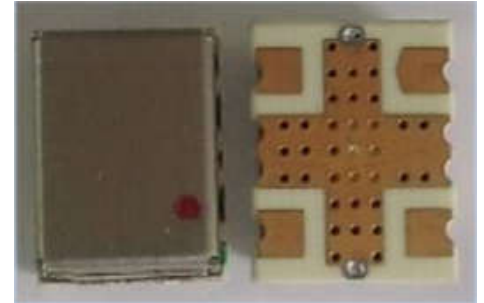
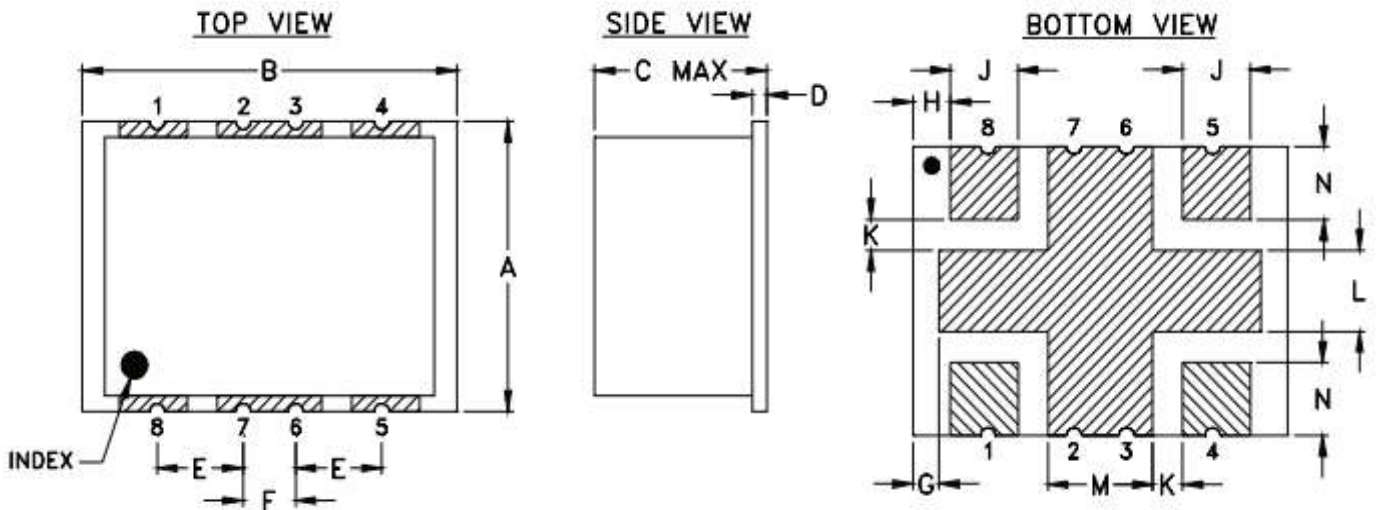


50Ω 20dB Directional Coupler
Features:

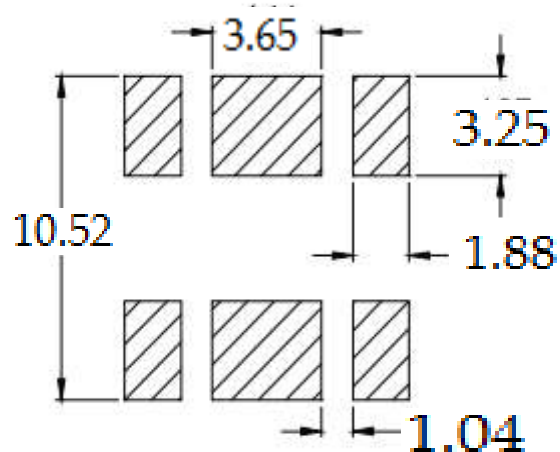
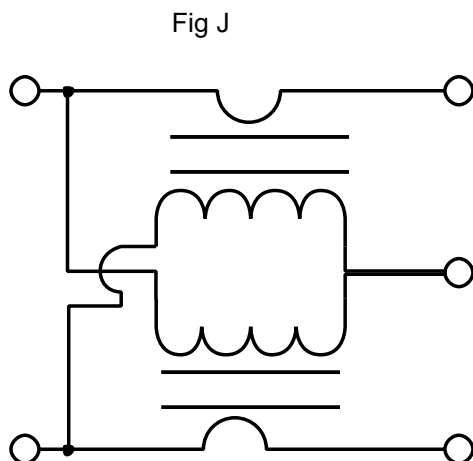
- ◆ Frequency Range: 10 to 540 MHz
- ◆ Surface mount and available in tape and reel
- ◆ Operating temperature range: -40°C to +85°C
- ◆ Storage temperature range: -55°C to +100°C

Applications:

- ◆ Signal monitoring
- ◆ military mobile

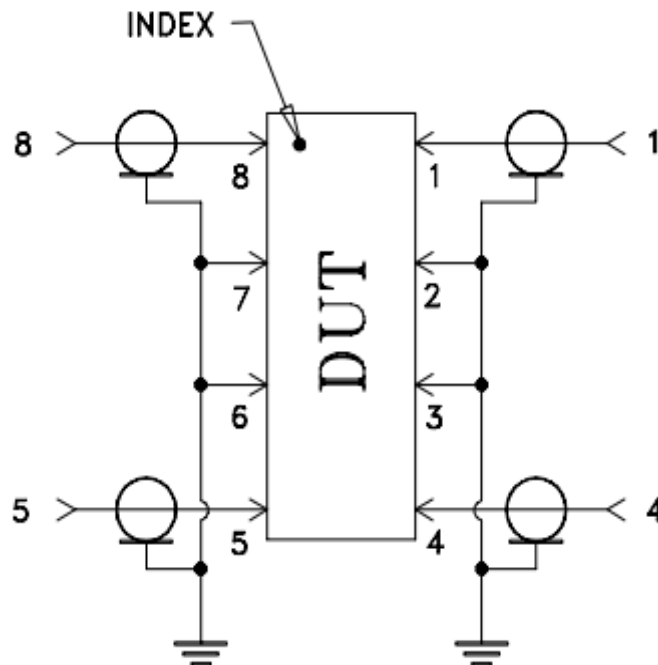

Dimension diagram (Unit:mm) :


A=9.35±0.30 B=12.70±0.30 C=7.00 Max D=0.80±0.15 E=2.92±0.15 F=1.78±0.15
 G=0.90±0.15 H=1.27±0.15 J=2.30±0.20 K=1.02±0.15 L=2.70±0.15 M=2.60±0.15 N=2.40±0.15

Electrical structure:
Recommended layout(mm):


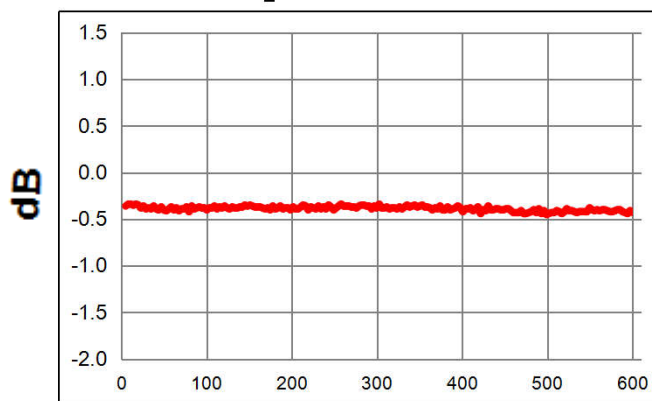
Pin Connections:

| Pin no. | Pin Connections |
|---------|------------------|
| 8 | Input |
| 1 | Ouput |
| 5 | Coupled(Forward) |
| 4 | Coupled(Reverse) |
| 2,3,6,7 | Ground |

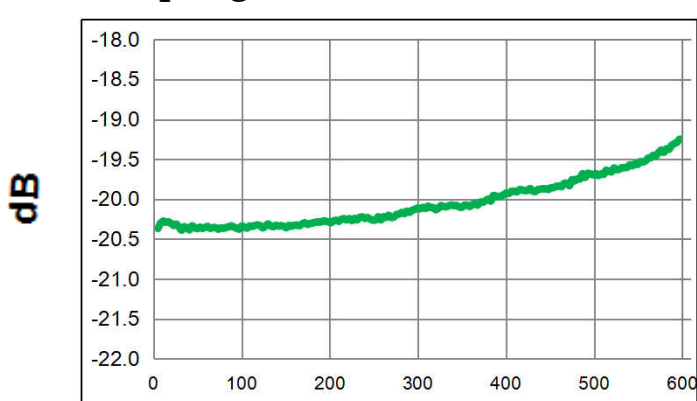
Application circuit :


Electrical Specifications: TA=25°C, 0dBm, Z0=50Ω:

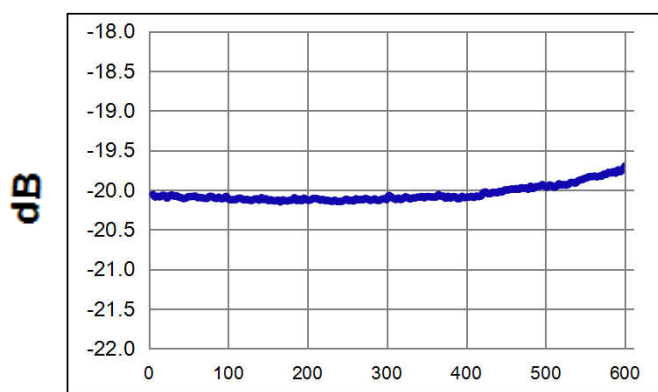
| Parameter | Test Conditions | Units | Min | Typ | Max |
|-------------------------------|-----------------|-------|------|------|------|
| Main line Loss(Pin8-1) | 10-540MHz | dB | — | 0.3 | 1.0 |
| Coupling(Forward)(Pin8-5) | 10-540MHz | dB | — | 20.2 | ±1.0 |
| Coupling(Reverse)(Pin1-4) | 10-540MHz | dB | — | 20.0 | ±1.0 |
| Input Return Loss(Pin8) | 10-540MHz | dB | 16.0 | 28.0 | — |
| Output Return Loss(Pin1) | 10-540MHz | dB | 16.0 | 30.0 | — |
| Coupled Fwd Return Loss(Pin5) | 10-540MHz | dB | 16.0 | 28.0 | — |
| Coupled Rev Return Loss(Pin4) | 10-540MHz | dB | 16.0 | 32.0 | — |
| Isolation(Pin8-4) | 10-540MHz | dB | 25.0 | 42.0 | — |
| Isolation(Pin1-5) | 10-540MHz | dB | 25.0 | 33.0 | — |

Main line Loss(pin8-1):


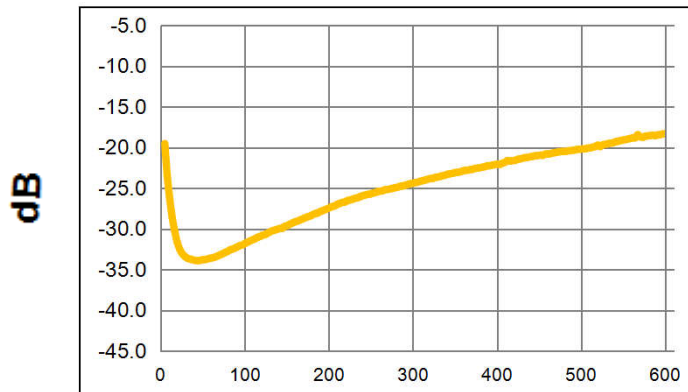
Frequency(MHz)

Coupling Forward (Pin8-5):


Frequency(MHz)

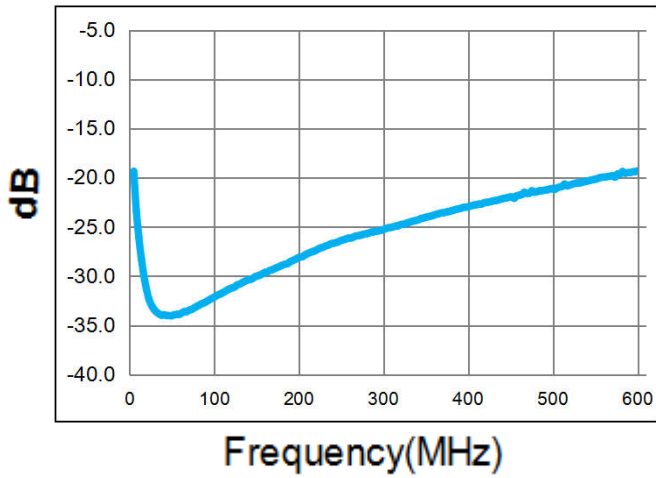
Coupling Reverse (Pin1-4):


Frequency(MHz)

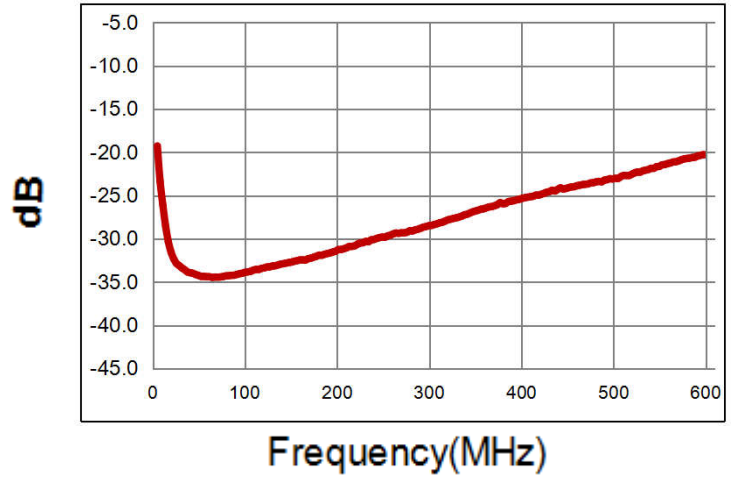
Input Return Loss(Pin8):


Frequency(MHz)

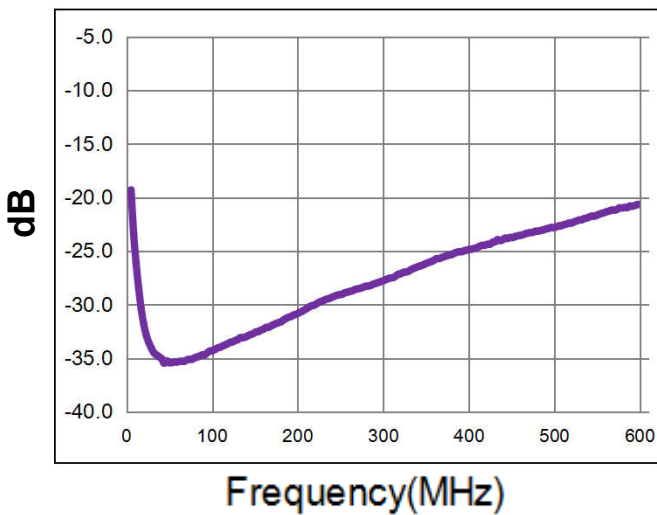
Output Return Loss(Pin1):



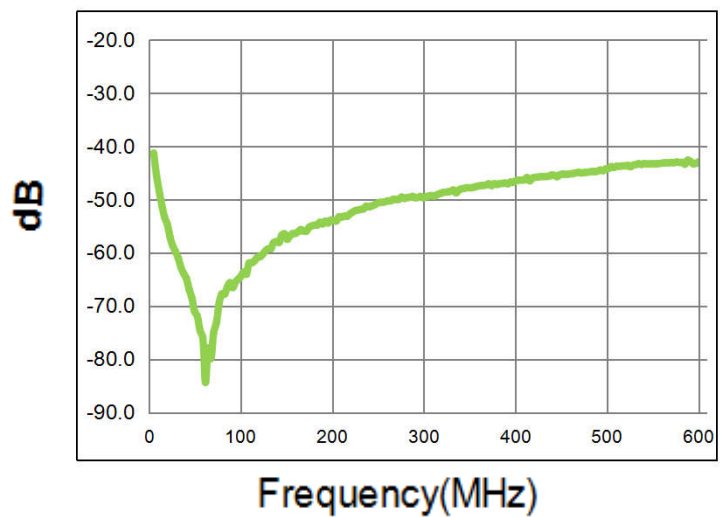
Coupled Fwd Return Loss(Pin5):



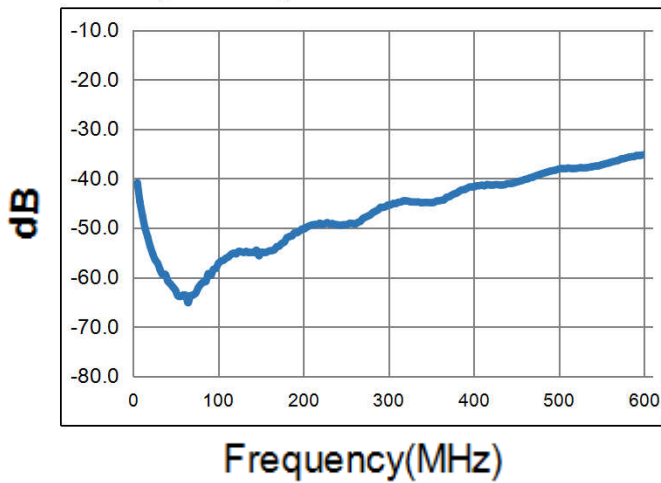
Coupled Rev Return Loss(Pin4):

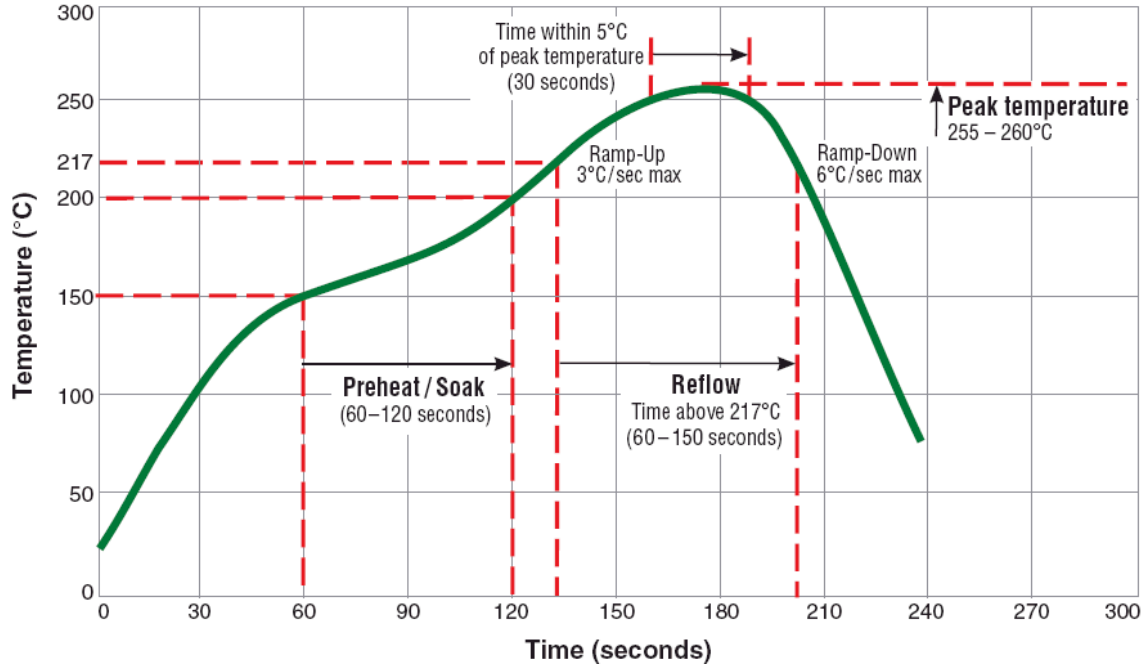
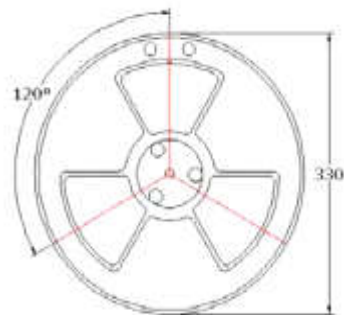
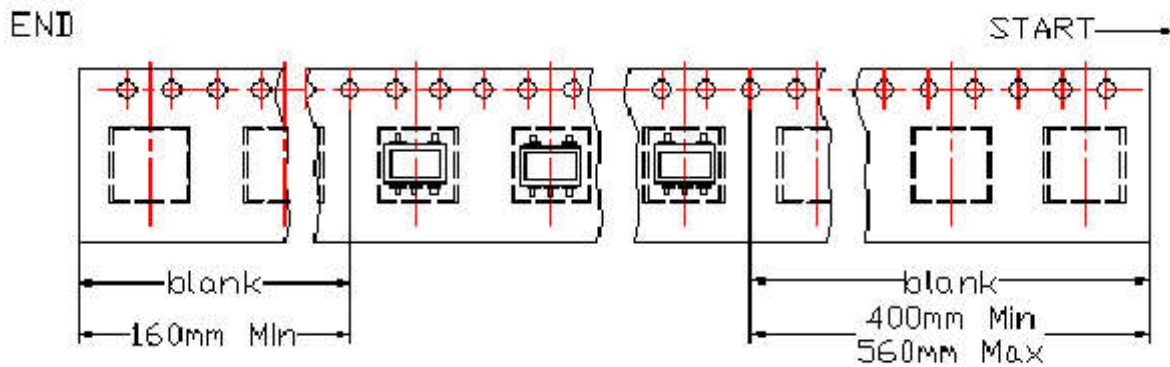


Isolation(Pin8-4):



Isolation(Pin1-5):



Recommended Soldering Temperature Graph:
Typical RoHS Reflow Profile

Packaging Dimension For Caeier Tape(UNIT:mm):


| A | B | C |
|------|-----|-----|
| 24.5 | 2.3 | 100 |

QUANTITY

500 PCS/Reel

Big Carton/ 5000PCS