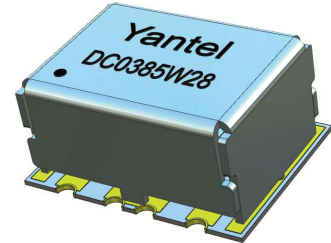


### Description

DC0385W28 surface mount bi-directional coupler provides high power handling up to 100W and low mainline loss of 0.25 dB typically for applications from 100 to 500 MHz. The coupler features core and wire construction mounted on an 8-lead printed laminate base with wraparound terminations for excellent solderability. The unit measures 9.65 x 12.7 x 6.35", accommodating dense circuit board layouts.



### Features:

- 100-500 MHz
- High power handling, up to 300 W
- Low mainline loss
- High directivity
- Excellent VSWR
- Good Repeatability

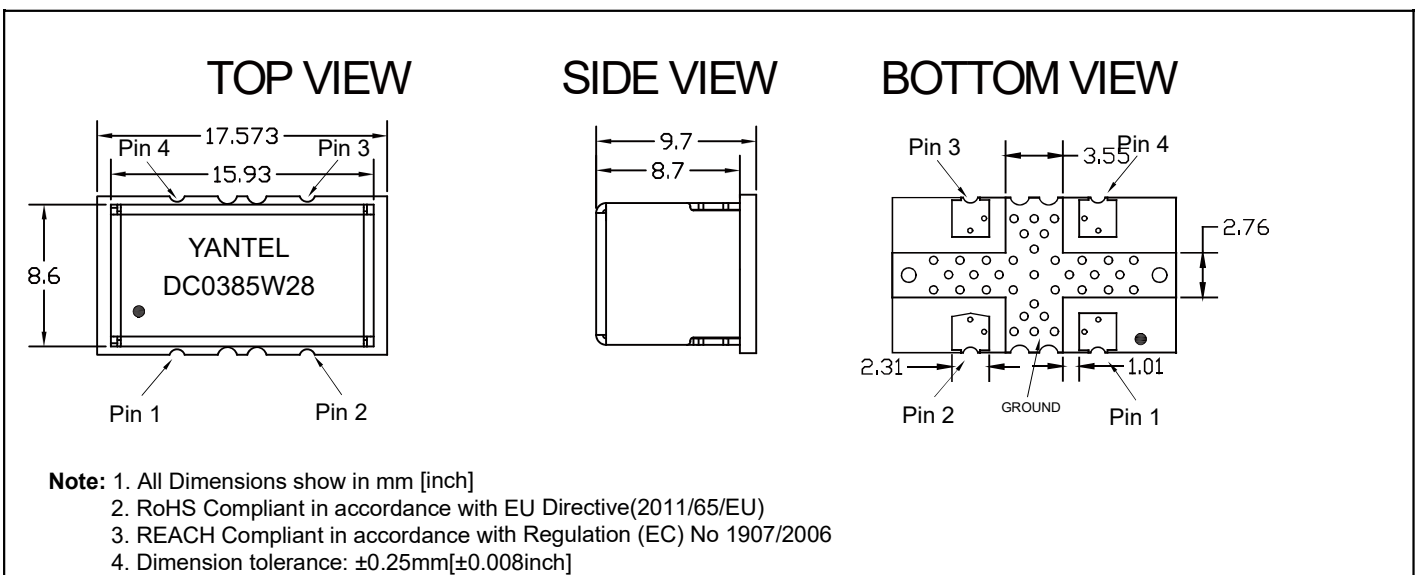
### Electrical Specifications (typical)

Frequency MHz	Forward Coupled dB	Directivity dB Min	Return Loss dB Min
100-500	28±1	20	19
Insertion Loss dB Max	Power Avg. CW Watts	Operating Temp. °C	
0.25	300	-55 to +85	

### Note:

1. All above test data resulting from specify demo board.
2. Insertion loss has removed the thru board loss.

### Mechanical Outline



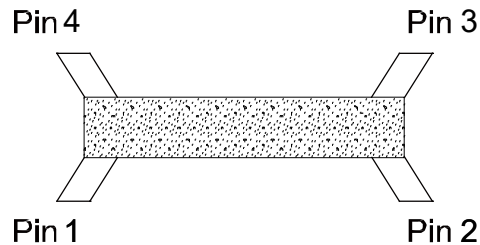
### Yantel Corporation

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For detailed performance specs & shopping online see Yantel web site : [www.yantel-corp.com](http://www.yantel-corp.com)

### Directional Coupler Pin Configuration

The DC0385W28 has an orientation marker to denote Pin1. Once port one has been identified the other ports are known automatically. Please see the chart below for clarification:



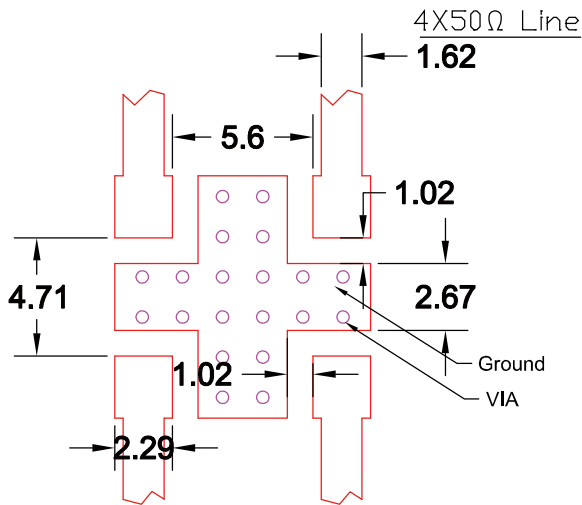
Pin 1	Pin 2	Pin 3	Pin 4
Input	Forward Coupled	Reflected Coupled	OUTPUT
OUTPUT	Reflected Coupled	Forward Coupled	Input

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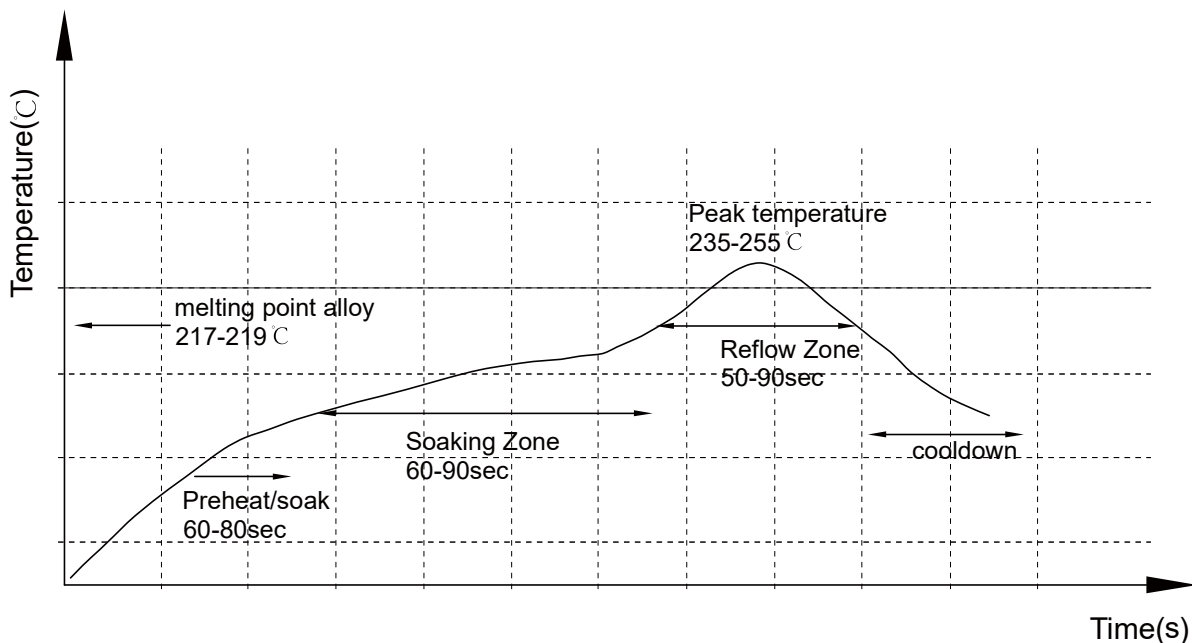
### Recommended PCB Layout



**NOTE:**

1. 50Ω line width is shown above designing from RO4350B dielectric thickness 0.762mm; copper 1 OZ
2. Bottom side of the PCB is continuous ground plane.
3. All dimensions shown in mm .

### Reflow Profile

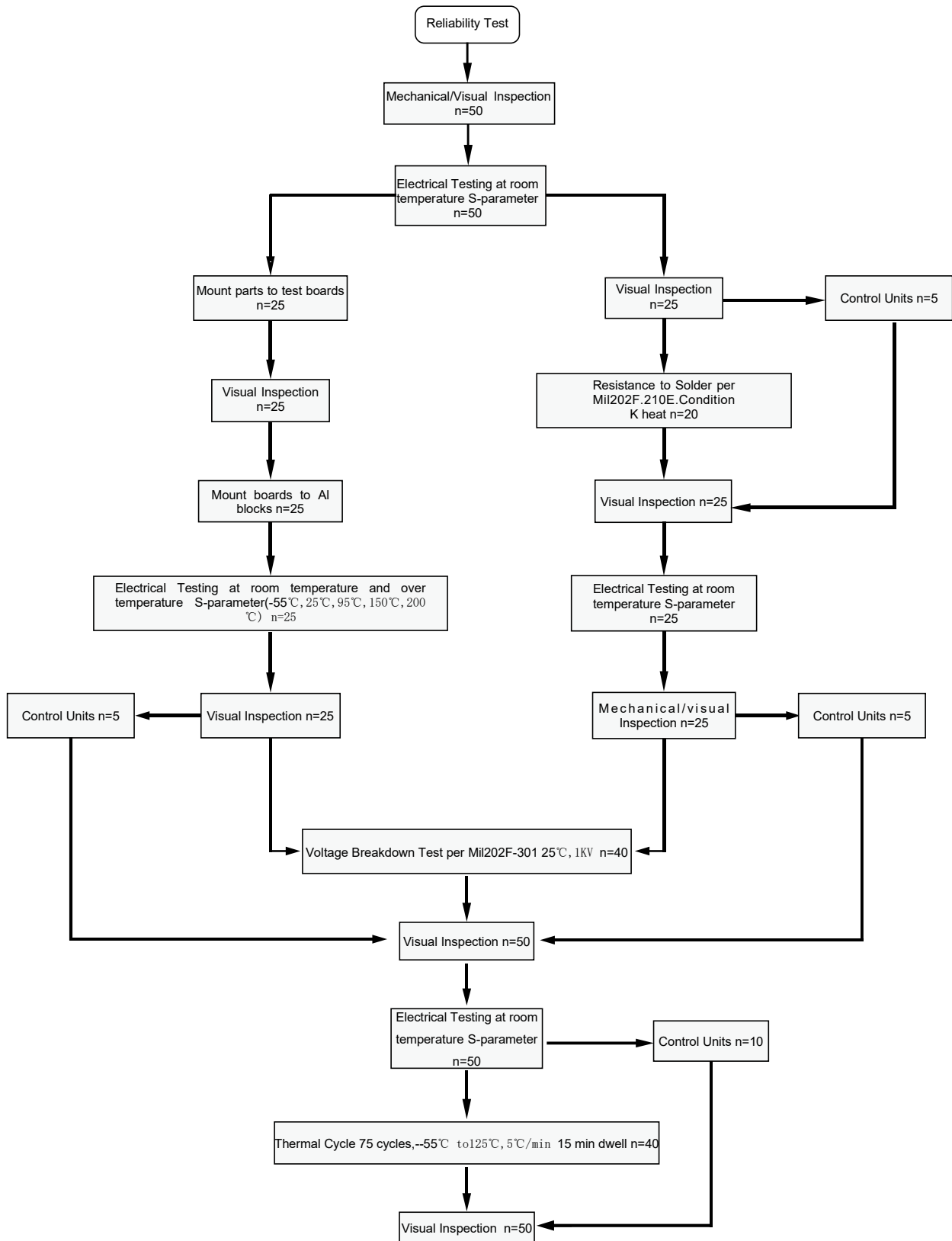


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### Reliability Test Flow



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### Reliability Test Flow

