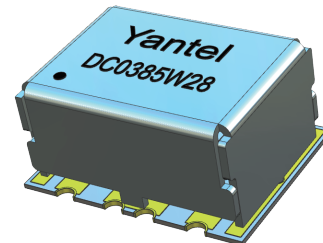


Description

High-power broadband surface-mounted and embedded coupler series, realizing the power synthesis and distribution of microwave high-power amplifier system, signal acquisition and other functions. Used in active phased array radar, microwave transceiver components, microwave amplifiers, radio stations, satellite communications and other projects, to provide standardized and customized high-quality and reliable products.

The performance and reliability indexes are in line with international products, and the pin definition and package size are compatible with international products, realizing 100% in-situ replacement.



Features:

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

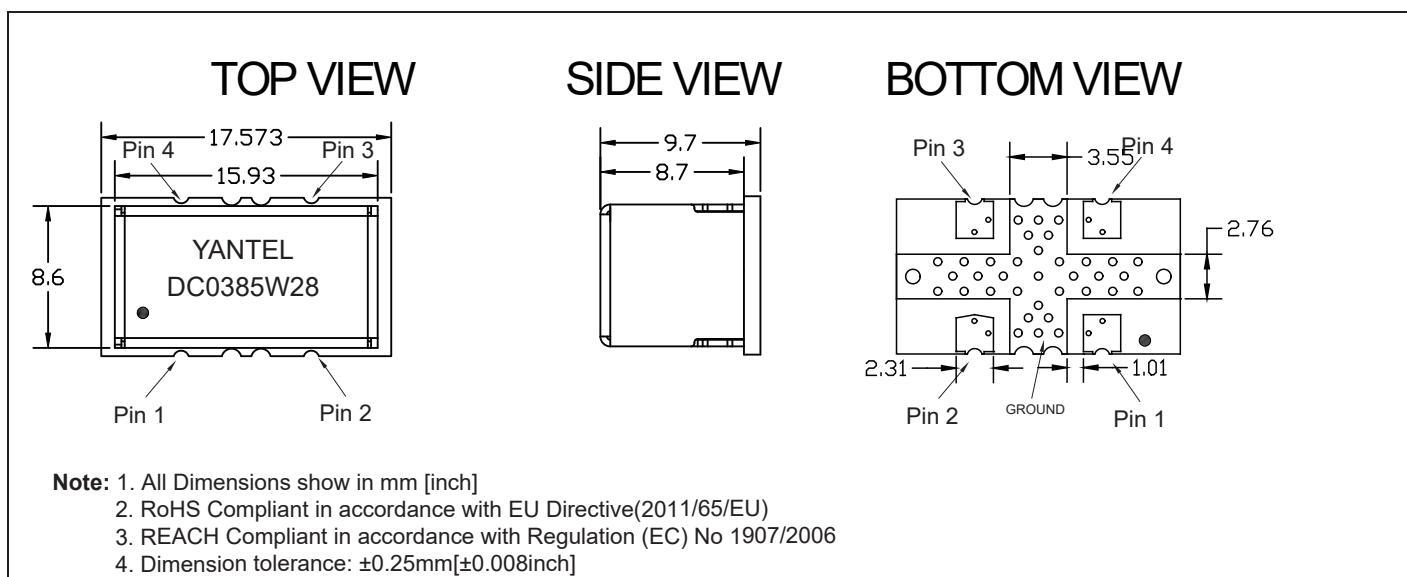
Electrical Specifications (typical)

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



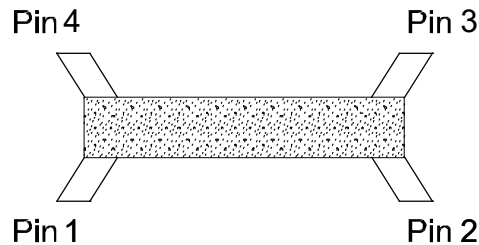
Yantel Corporation

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Tel: 86-755-8355-1886 Fax: 86-755-8355-2533

For detailed performance specs & shopping online see Yantel web site : 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:



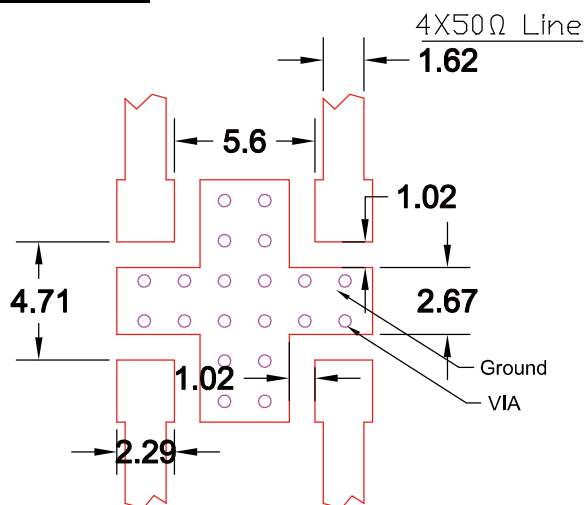
Pin 1	Pin 2	Pin 3	Pin 4
Input	Forward Coupled	Reflected Coupled	OUTPUT
OUTPUT	Reflected Coupled	Forward Coupled	Input

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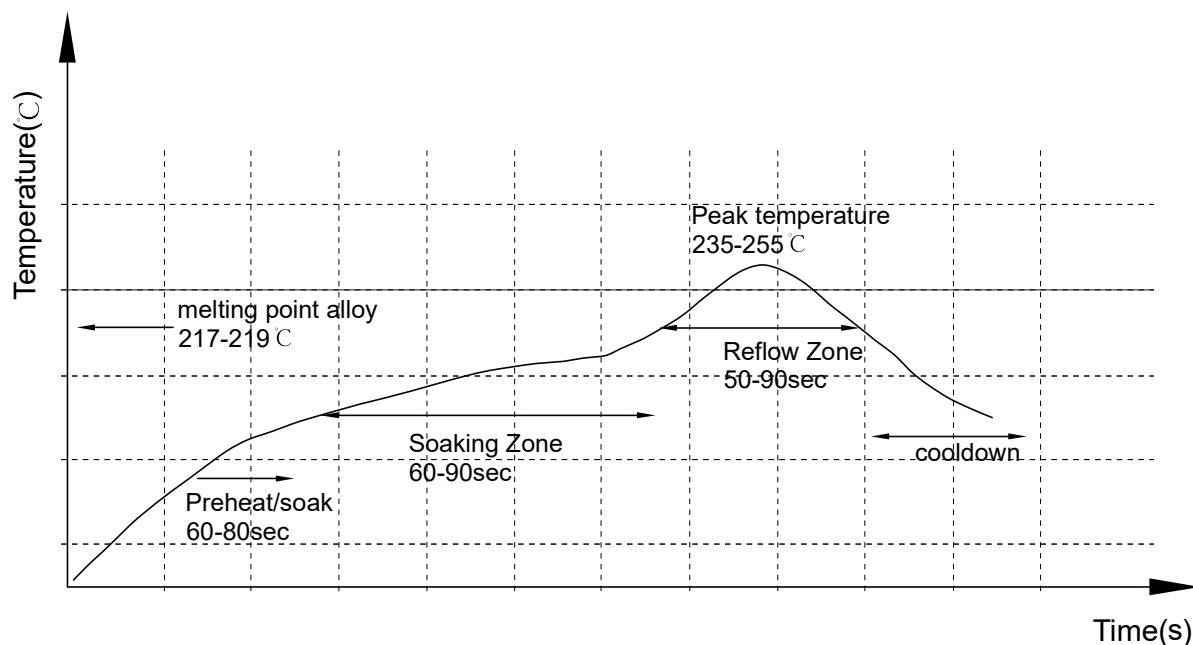
Recommended PCB Layout



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

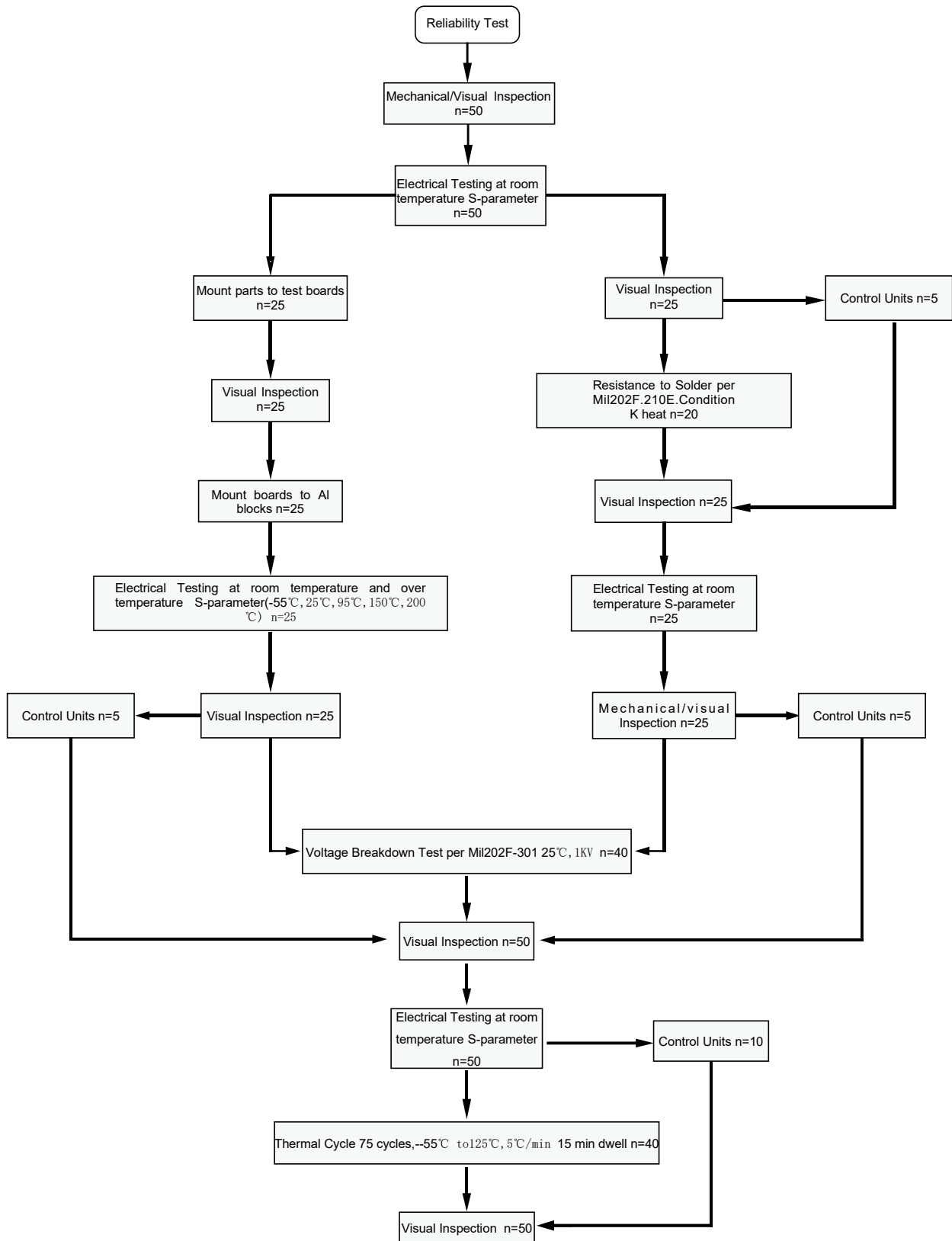


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Reliability Test Flow

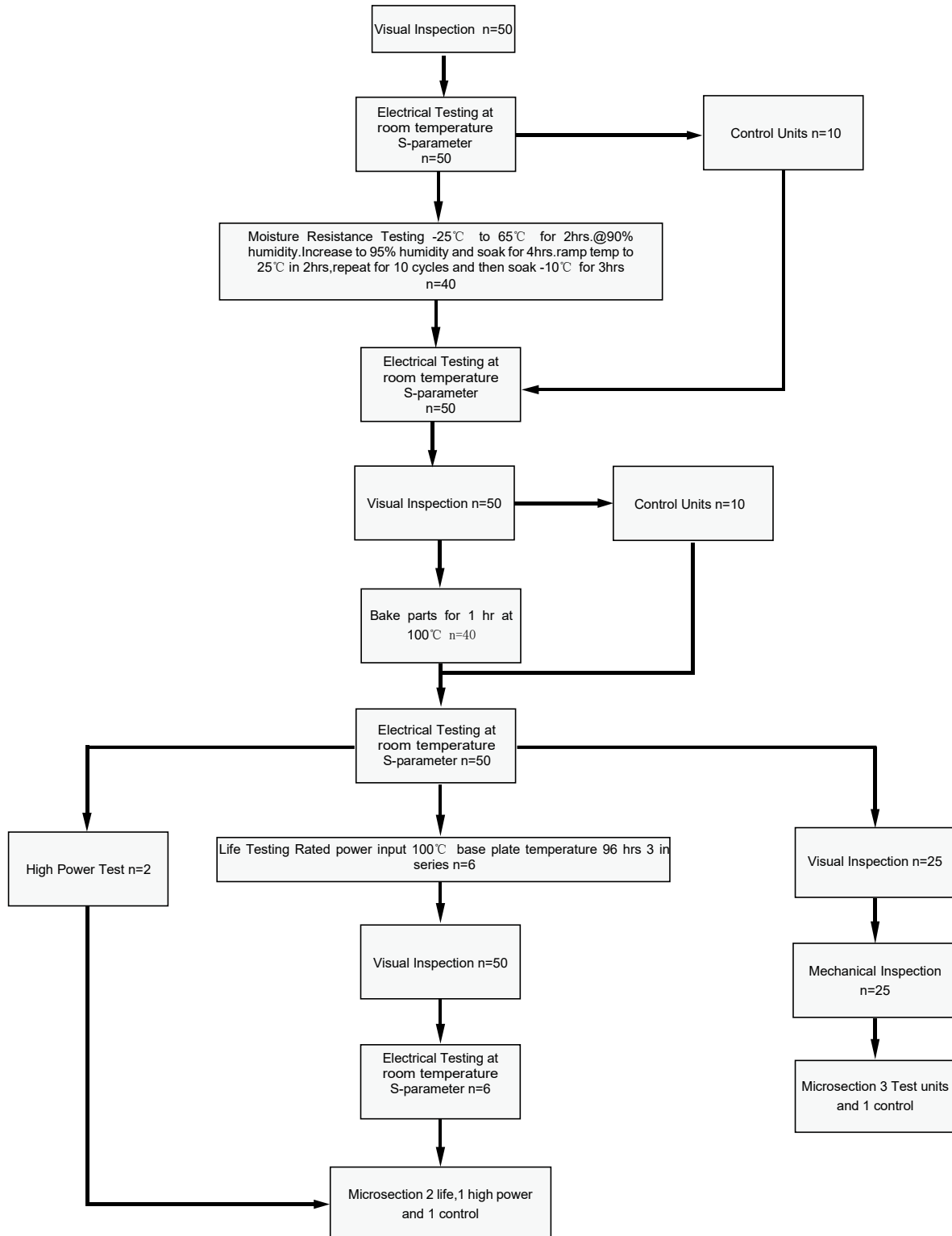


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Reliability Test Flow



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