

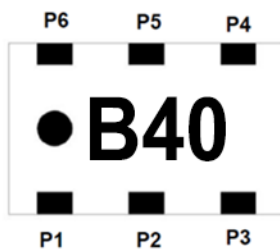
Features

- Multilayer monolithic construction yields high reliability
- Low insertion loss and small size SMD chip design
- Can simplify your complex tuning and circuit design
- LTCC process

Specifications

NO.	Items		Spec	Unit
1	Frequency range		300~500	MHz
2	Unbalanced Impedance		50	Ohms
3	Differential Balanced Imp.		50	Ohms
4	Return Loss at Unbalanced Port		10 min.	dB
5	Insertion Loss	300-500MHz	0.8 max.	dB
		330-500MHz	0.7 max.	
6	Amplitude Difference	300-500MHz	-0.8~+0.8	dB
		300-400MHz	0~+0.8	
		400-450MHz	-0.4~+0.3	
		450-500MHz	-0.8~-0.1	
7	Phase Difference	300-330MHz	180 ± 10	deg
		330-470MHz	180 ±5	
		470-500MHz	180 ±10	
8	CMRR		15 min.	dB
9	Power Capacity (CW)		3 max.	W
Operating & Storage Condition (Component) Operation Temperature Range: -40°C ~ +85°C Storage Temperature Range: -40°C ~ +85°C				
Storage Condition before Soldering (Included packaging material) Storage Temperature Range: +5 ~ +40 °C Humidity: 30 to 70% relative humidity				

Construction



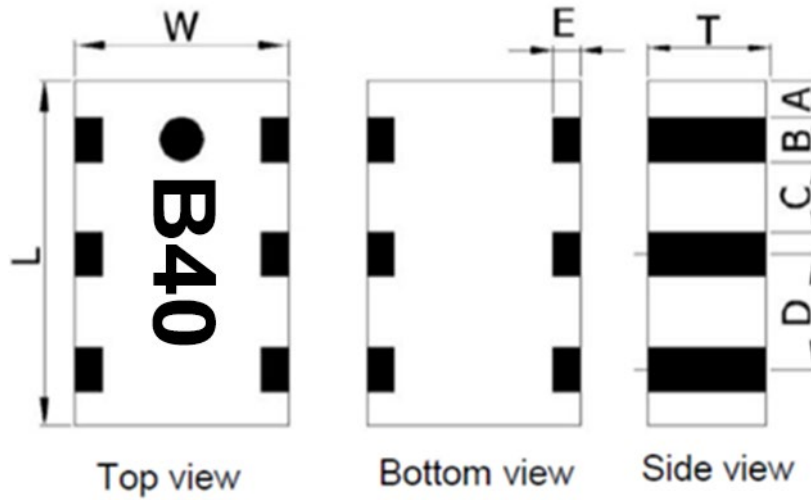
P1	Unbalance Port	P4	Balance Port
P2	GND	P5	GND
P3	Balance Port	P6	NC

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Add: No.308-322,3F,Building 1,Juchuang Jingu Innovation Park,Wenyuan Road 35,Xili Street,Nanshan,Shenzhen,China
 Tel: 86-755-8355-1886 Fax: 86-755-8355-2533

For detailed performance specs & shopping online see Yantel web site : www.yantel-corp.com

Dimensions

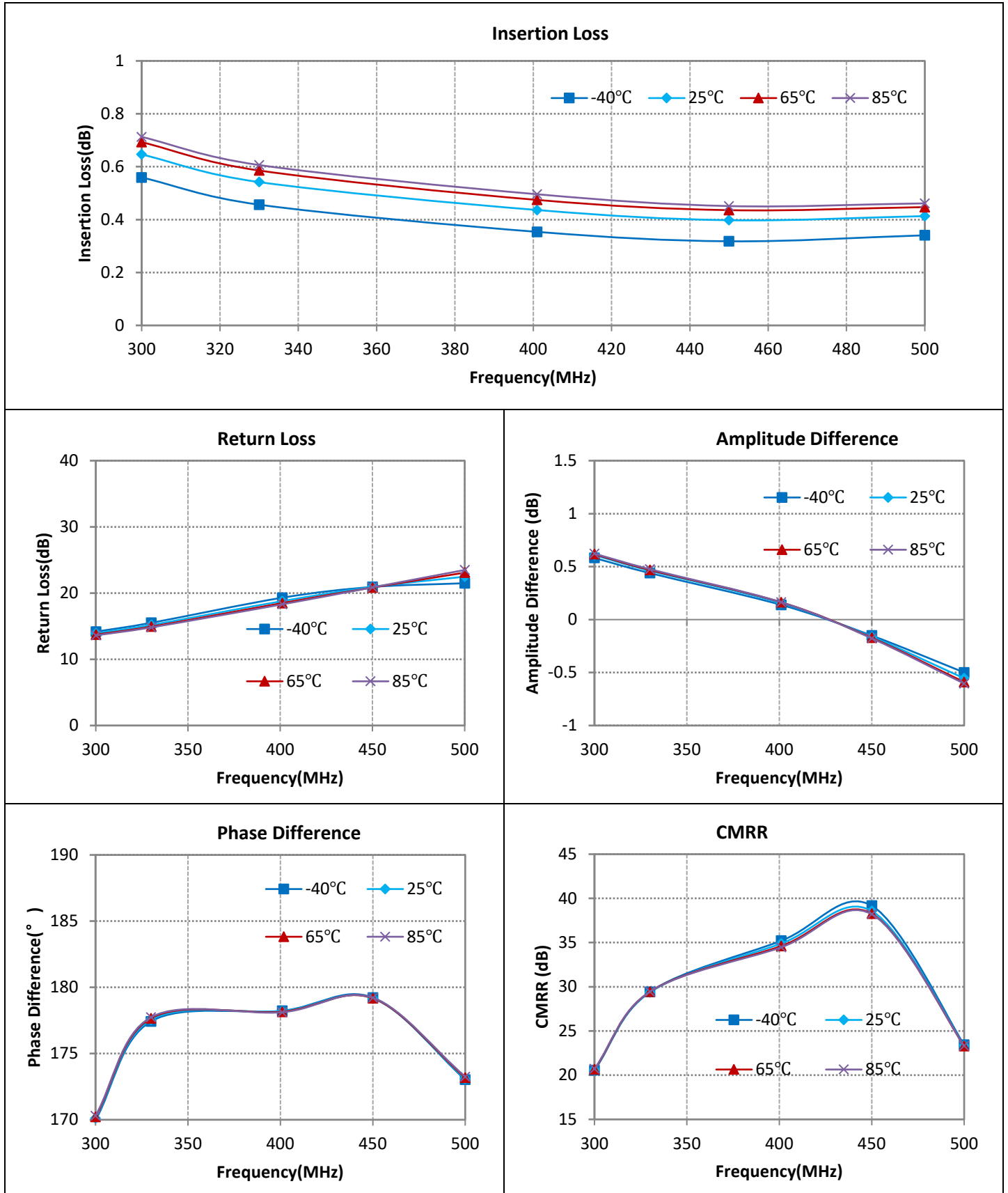


Symbol	L	W	T	A	B	C	D	E
Dimension (mm)	2.0 ± 0.15	1.25 ± 0.15	0.95 ± 0.15	0.20 ± 0.1	0.30 ± 0.1	0.35 ± 0.1	0.65 ± 0.1	0.25 ± 0.1

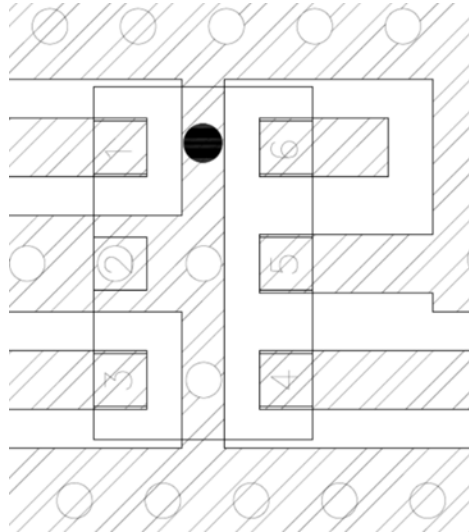
Typical Performance Data T=25°C

Frequency (MHz)	Return Loss (dB)	Insertion Loss (dB)	Amplitude Difference (dB)	Phase (deg)	CMRR (dB)
300	13.94	0.65	0.61	170.13	20.61
330	15.18	0.54	0.46	177.56	29.37
401	18.78	0.44	0.16	178.21	34.89
450	20.94	0.40	-0.16	179.17	38.57
500	22.49	0.41	-0.55	173.11	23.33

Typical Electrical Characteristics (T=-40°C,25°C,65°C,85°C)

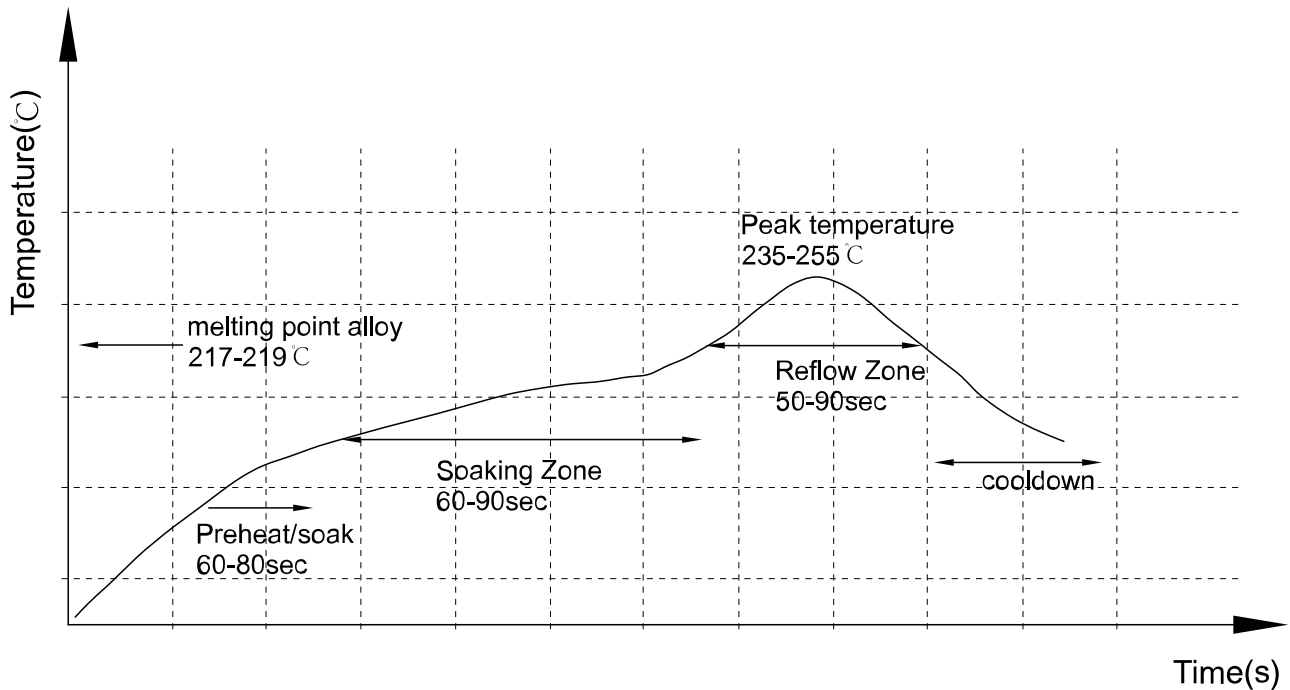


Mounting Considerations



Line width to be design to match 50W characteristic impedance, depending on PCB material and thickness

Reflow Profile

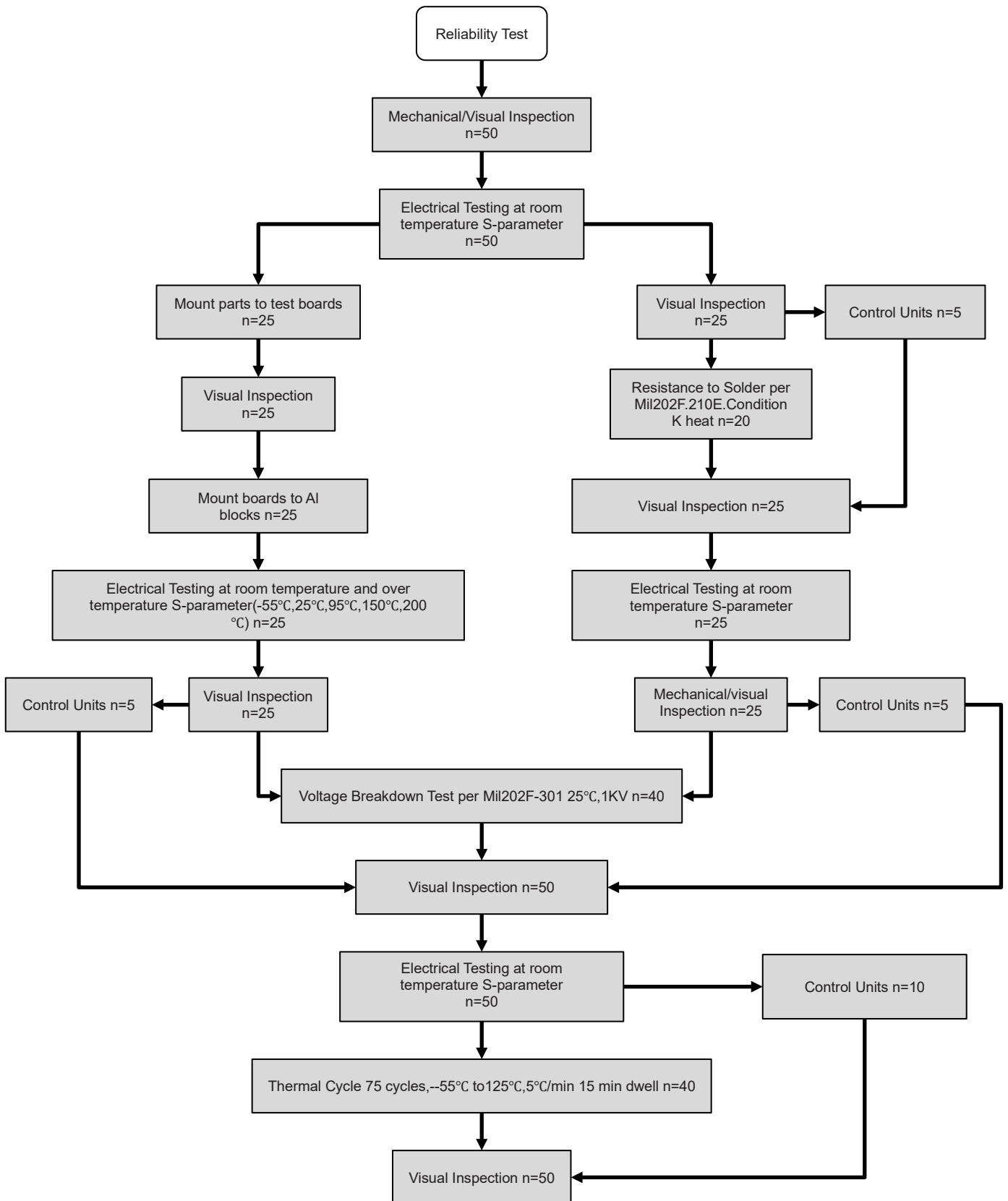


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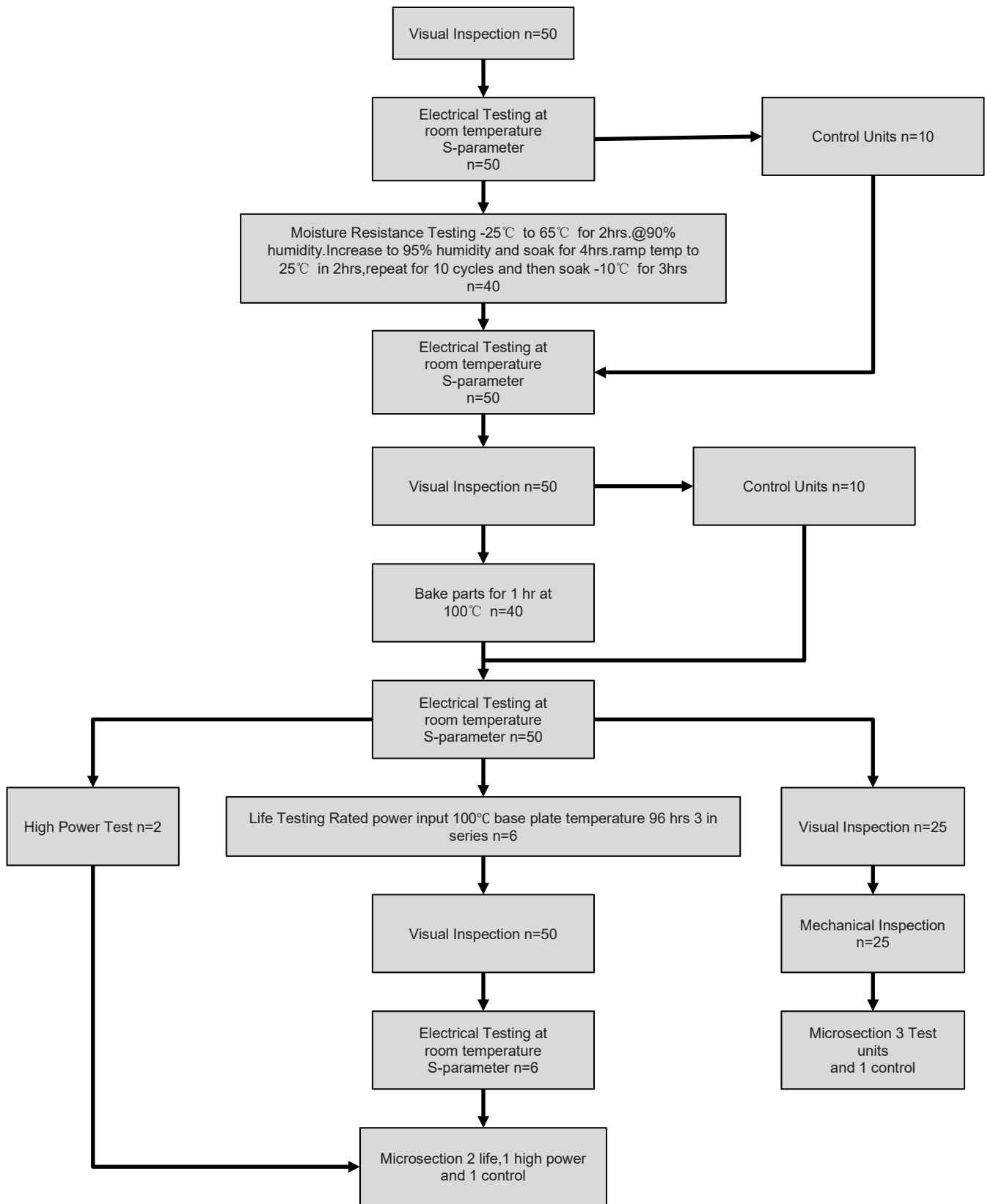
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Reliability Test Flow



Reliability Test Flow

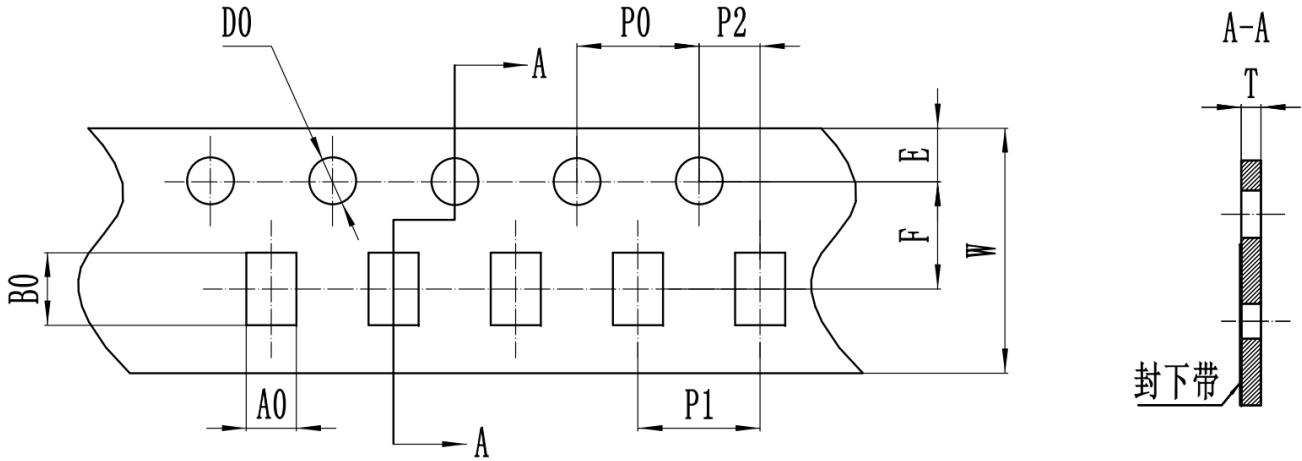


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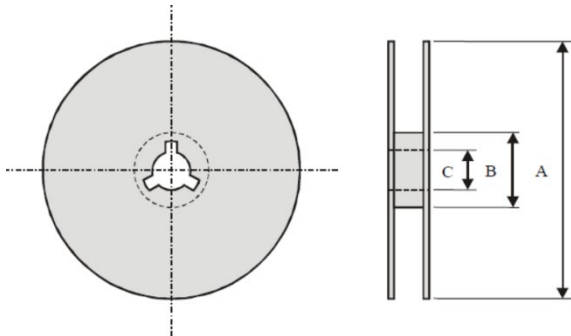
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Packaging (unit: mm)



Index	A0	B0	∅D	T	W	E	F	P0	P1	P2
Dimension (mm)	1.50 ± 0.05	2.25 ± 0.05	1.55 ± 0.05	1.07 ± 0.05	8.0 ± 0.1	1.75 ± 0.1	3.50 ± 0.05	4.0 ± 0.1	4.0 ± 0.1	2.00 ± 0.05



Index	A	B	C
Dimension (mm)	∅177.8	∅56.8	∅11.1

Taping Quantity: 4000 pieces per 7" reel