

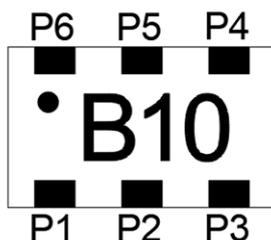
Features

- 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

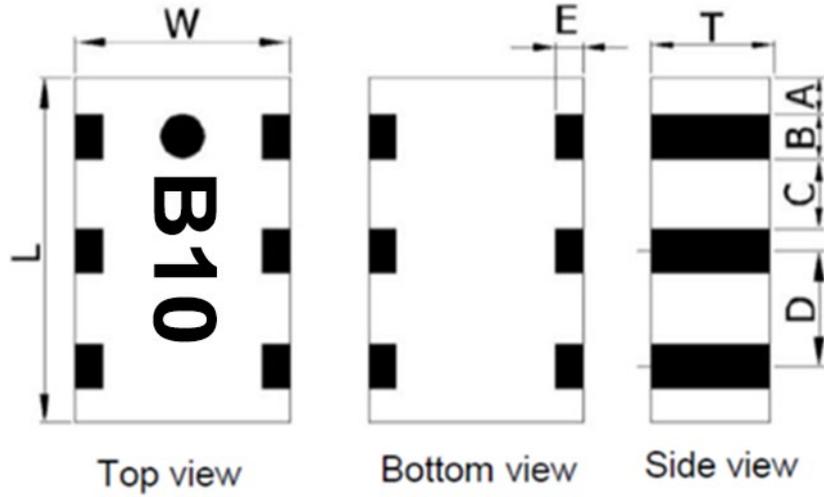
NO.	Items		Spec	Unit
1	Frequency range		600~1400	MHz
2	Unbalanced Impedance		50	Ohms
3	Differential Balanced Imp.		50	Ohms
4	Return Loss at Unbalanced Port		10 min.	dB
5	Insertion Loss	600MHz-1400MHz	1.0 max.	dB
		650MHz-800MHz	0.7 max	
		1200MHz-1300MHz	0.7 max	
6	Amplitude Difference	600MHz-1400MHz	-0.6~+0.8	dB
		650MHz-800MHz	+0.2~+0.8	
		1200MHz-1300MHz	-0.5~0	
7	Phase Difference	600MHz-1400MHz	180 ± 5	deg
8	CMRR		20 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 or DC feed + RF GND	P5	GND
P3	Balance Port	P6	NC

Dimensions

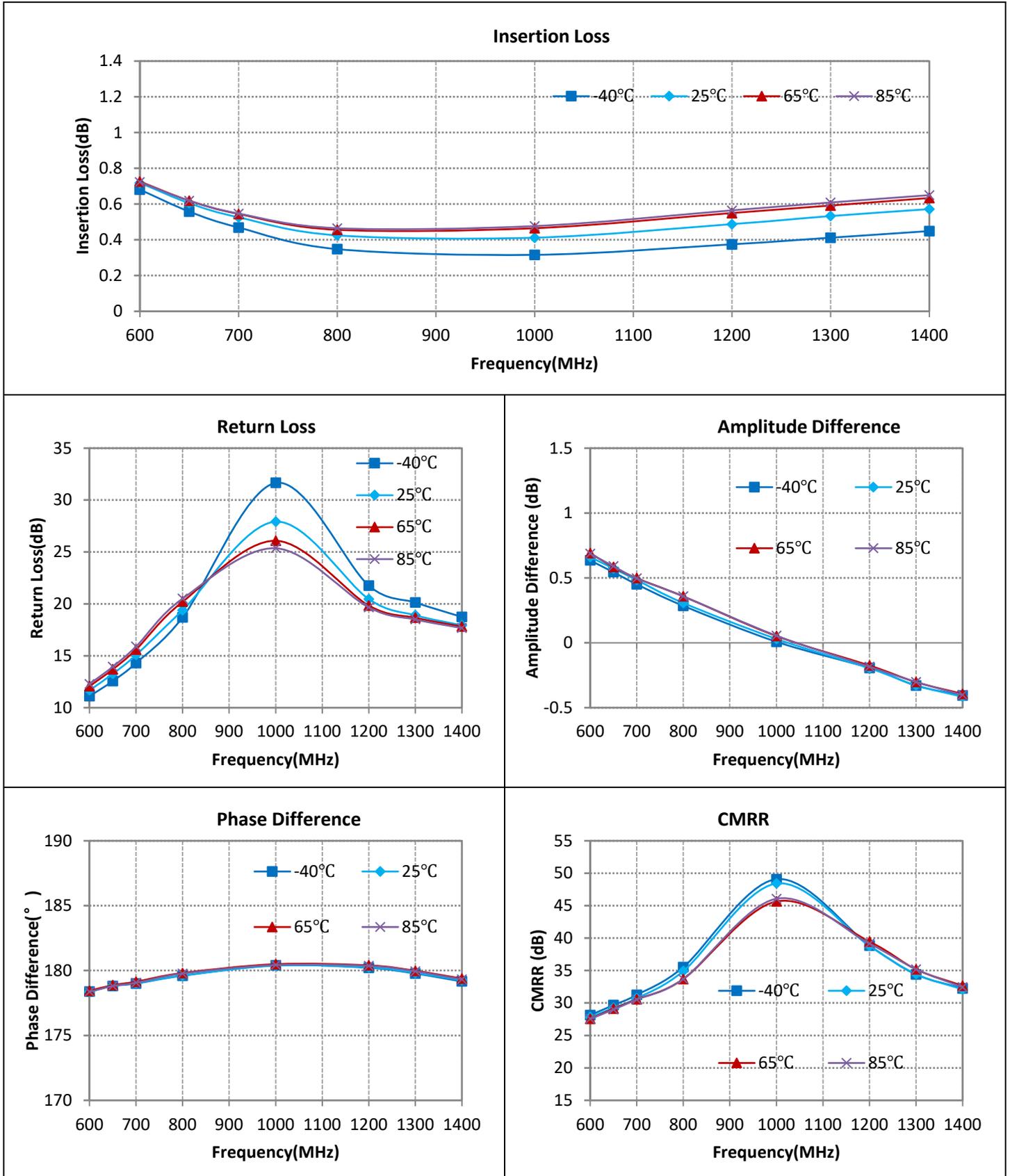


Symbol	L	W	T	A	B	C	D	E
Dimension (mm)	2.0 ± 0.15	1.25 ± 0.15	0.85 ± 0.15	0.20 ± 0.1	0.30 ± 0.1	0.35 ± 0.1	0.65 ± 0.1	0.25 ± 0.1

Typical Performance Data T=25°C

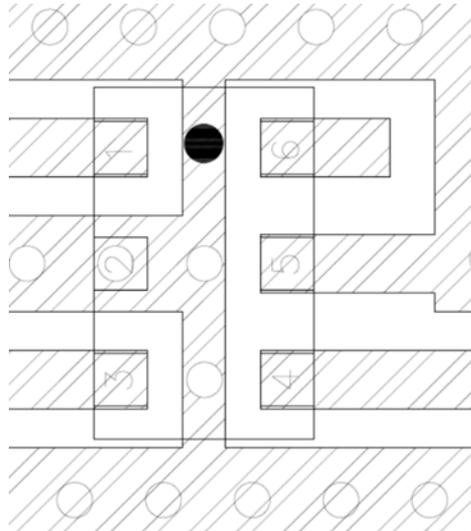
Frequency (MHz)	Return Loss (dB)	Insertion Loss (dB)	Amplitude Difference (dB)	Phase (deg)	CMRR (dB)
600	11.67	0.72	0.66	178.37	27.83
650	13.26	0.61	0.57	178.83	29.25
700	15.07	0.53	0.48	179.03	30.72
800	19.39	0.43	0.31	179.62	34.91
1000	27.92	0.41	0.03	180.38	48.42
1200	20.46	0.49	-0.20	180.25	38.78
1300	18.90	0.53	-0.33	179.82	34.45
1400	17.93	0.57	-0.42	179.25	32.10

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



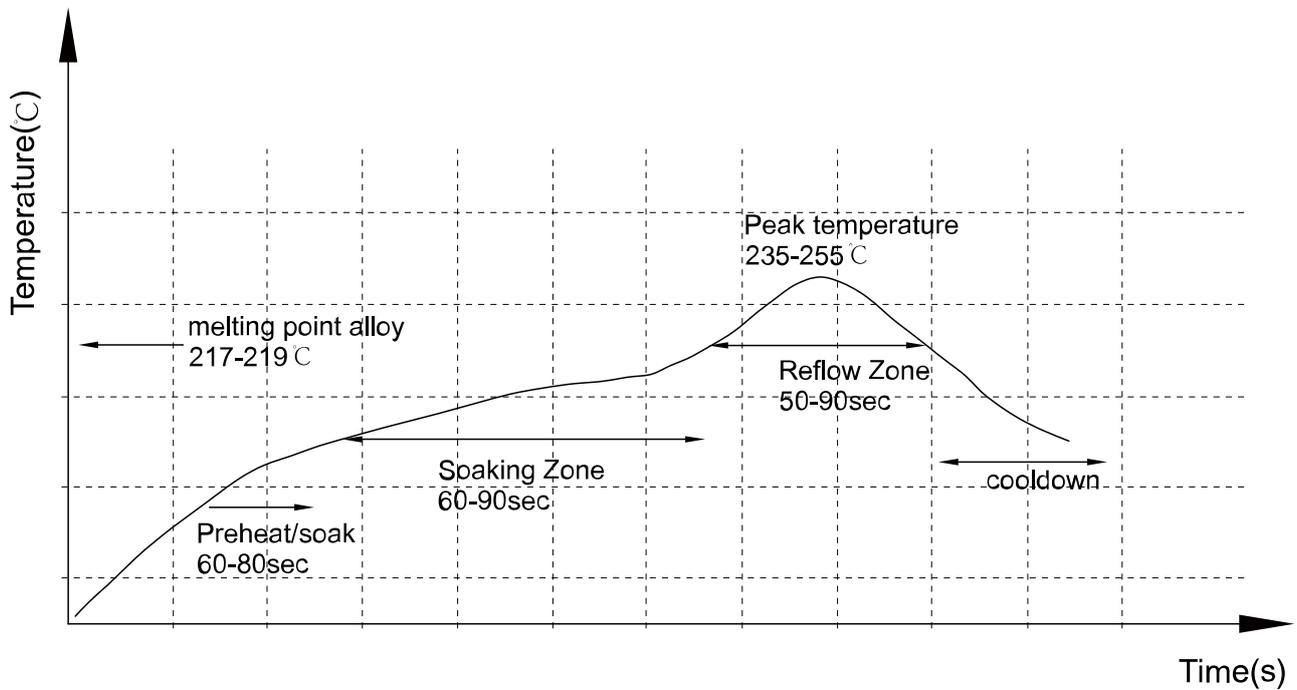
Mounting Considerations

Without DC Feed

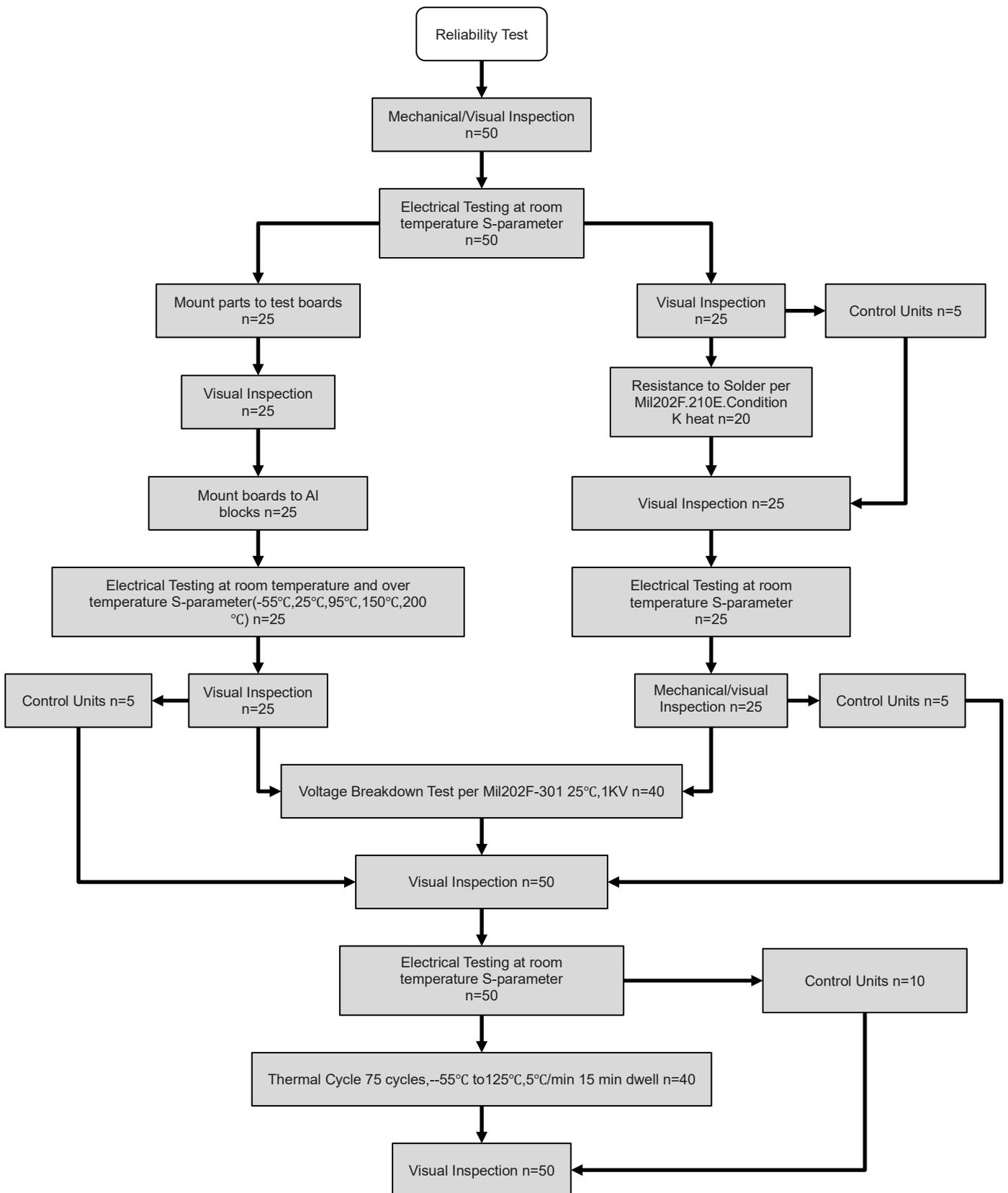


Line width to be design to match 50W characteristic impedance, depending on PCB material and thickness

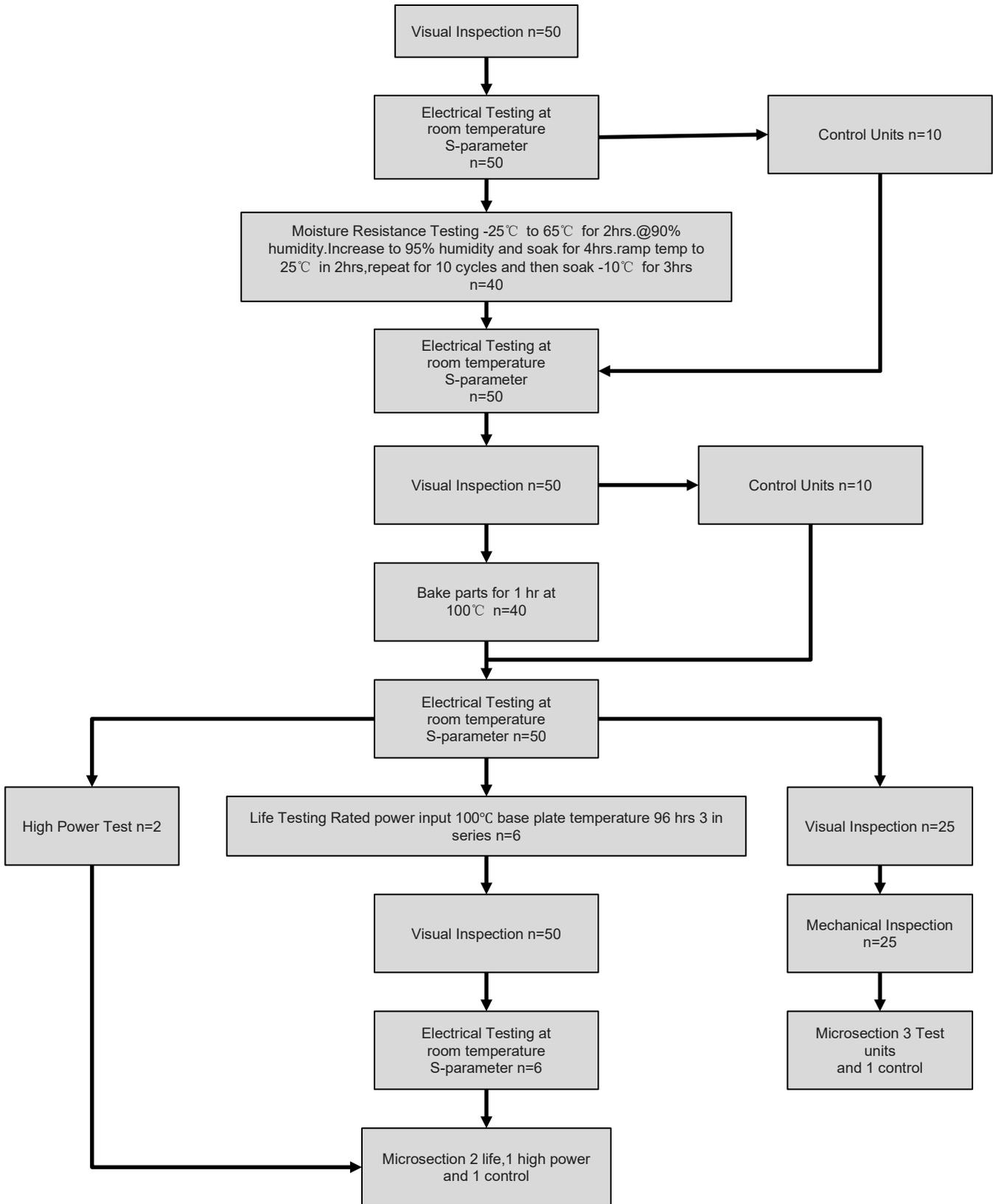
Reflow Profile



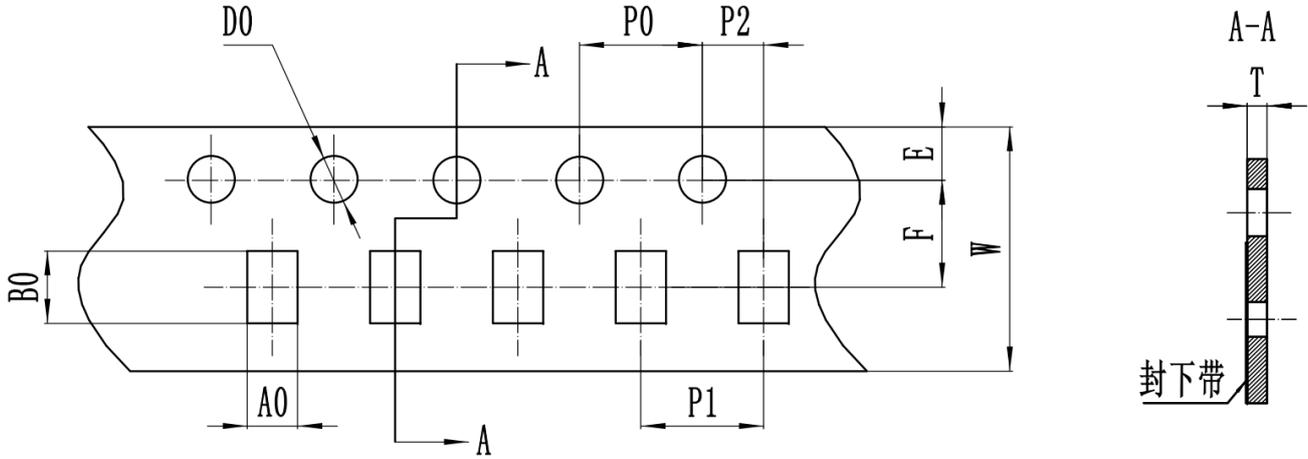
Reliability Test Flow



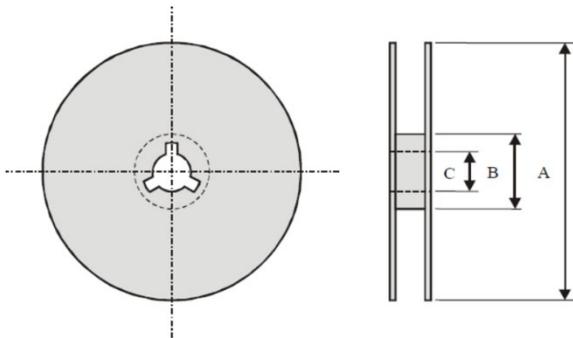
Reliability Test Flow



Plastic Tape specifications (unit: mm)



Index	A0	B0	$\varnothing D$	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)	$\varnothing 177.8$	$\varnothing 56.8$	$\varnothing 11.1$

Taping Quantity: 4000 pieces per 7" reel