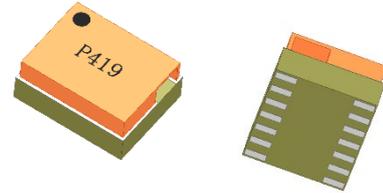


Features

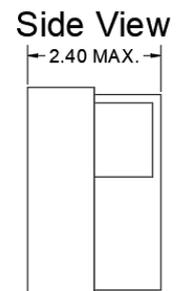
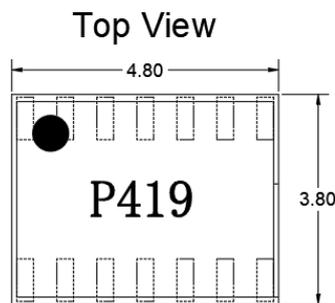
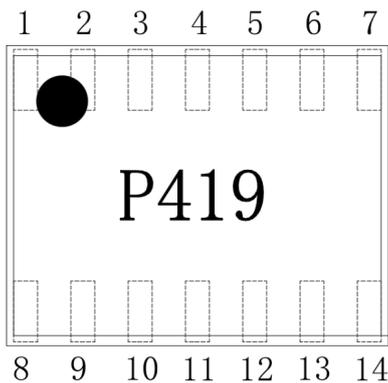
- Multilayer monolithic construction yields high reliability
- Low insertion loss and small size SMD chip design
- Can simplify your complex tuning and circuit design
- LTCC process



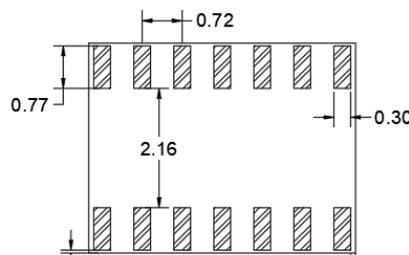
Specifications

NO.	Items	Spec	Typ.	Unit
1	Frequency range	80~300	80~300	MHz
2	Insertion Loss, above 6.0 dB	1.85 max.	1.3	dB
		@120MHz 1.0max.	0.7	
3	Isolation.	5 min.	6.5	dB
4	Phase Unbalance	5 max.		°
5	Amplitude Unbalance	0.8 max.		dB
6	Return Loss (Input)	9 min.	11.5	dB
7	Return Loss (Output)	9 min.	12.5	dB
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 & Dimensions



Bottom View



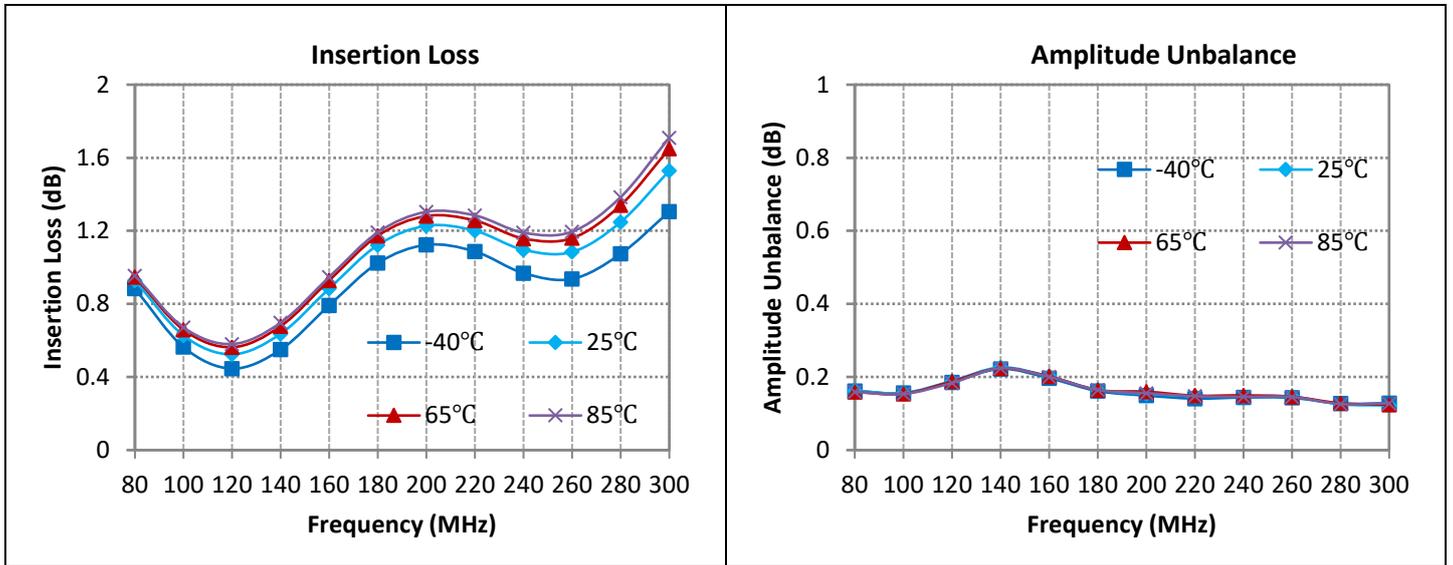
Unit: mm
Tolerance: ±0.20mm

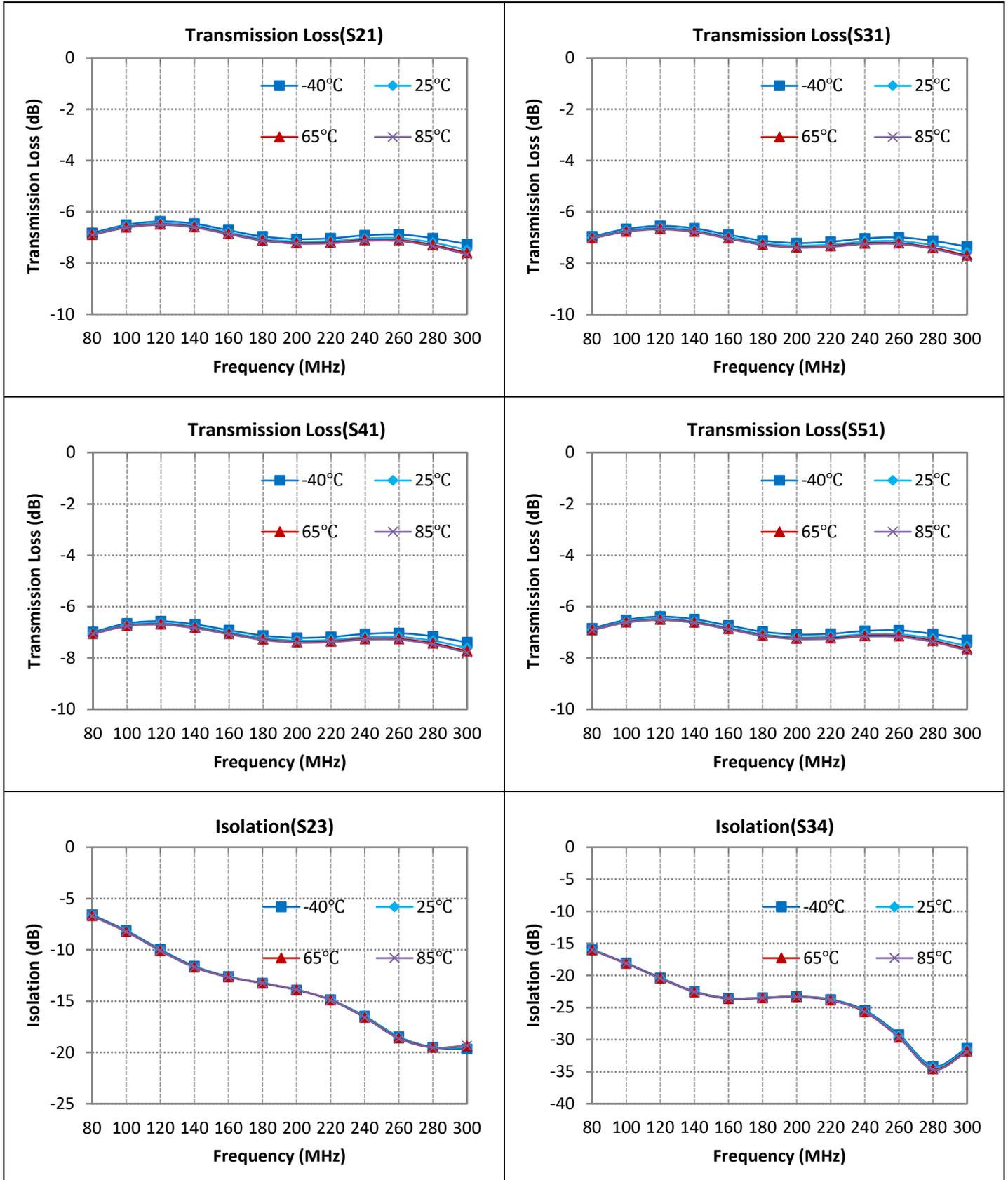
SUM PORT	11
PORT 1	2
PORT 2	3
PORT 3	5
PORT 4	6
GND	1、4、7、8、9、10、12、13、14

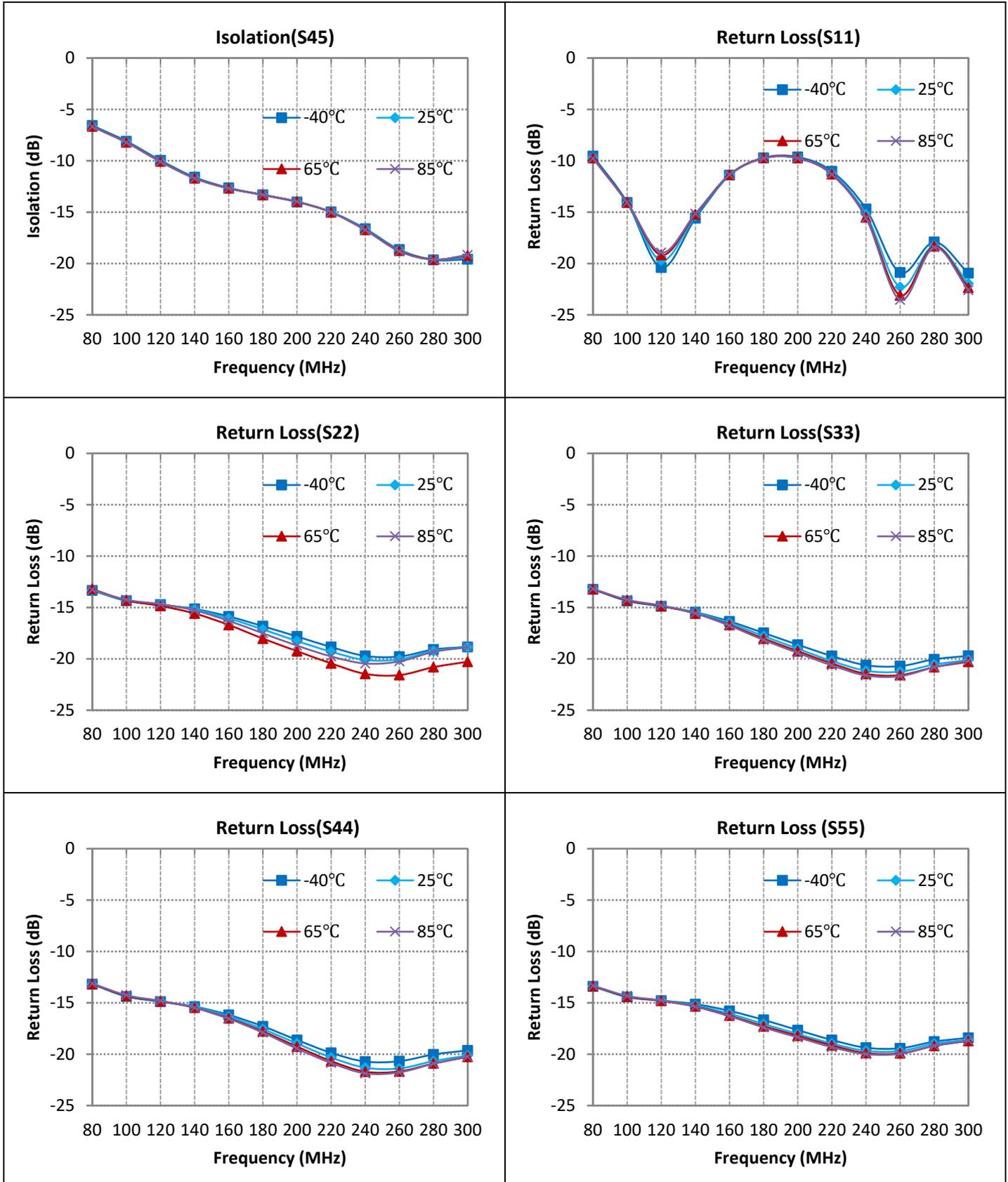
Typical Performance Data T=25°C

Frequency (MHz)	Transmission Loss (dB)				IL (dB)	Amplitude Unbalance (dB)	Isolation (dB)			Return Loss (dB) (Input) (S11)	Return Loss (dB) (Output1) (S22)	Return Loss (dB) (Output2) (S33)	Return Loss (dB) (Output3) (S44)	Return Loss (dB) (Output4) (S55)	Phase (deg)				Phase Unbalance (dB)
	S21	S31	S41	S51			S23	S34	S45						S21	S31	S41	S51	
80	-6.87	-7.00	-7.03	-6.89	0.93	0.16	-6.64	-16.01	-6.63	-9.69	-13.35	-13.23	-13.19	-13.40	-66.03	-67.09	-66.88	-66.07	1.06
100	-6.57	-6.73	-6.71	-6.58	0.63	0.16	-8.18	-18.12	-8.17	-14.13	-14.34	-14.32	-14.36	-14.41	-86.28	-87.28	-87.37	-86.32	1.09
120	-6.45	-6.62	-6.64	-6.47	0.52	0.19	-10.03	-20.44	-10.04	-19.71	-14.72	-14.85	-14.87	-14.79	-107.49	-108.44	-108.85	-107.67	1.36
140	-6.55	-6.73	-6.78	-6.58	0.64	0.23	-11.66	-22.58	-11.67	-15.34	-15.21	-15.50	-15.40	-15.27	-129.26	-130.10	-130.31	-129.41	1.05
160	-6.81	-6.98	-7.01	-6.82	0.88	0.20	-12.64	-23.65	-12.68	-11.40	-16.06	-16.52	-16.35	-16.06	-150.64	-151.31	-151.40	-150.81	0.75
180	-7.06	-7.22	-7.22	-7.08	1.12	0.16	-13.26	-23.55	-13.33	-9.76	-17.14	-17.79	-17.56	-17.07	-171.38	-171.92	-172.11	-171.62	0.73
200	-7.17	-7.32	-7.32	-7.19	1.23	0.15	-13.91	-23.36	-14.00	-9.74	-18.27	-19.01	-18.97	-18.04	167.50	167.09	166.73	167.17	0.77
220	-7.14	-7.28	-7.29	-7.17	1.20	0.15	-14.88	-23.85	-15.00	-11.24	-19.31	-20.21	-20.33	-18.97	145.01	144.74	144.29	144.66	0.72
240	-7.04	-7.16	-7.19	-7.08	1.10	0.15	-16.52	-25.60	-16.66	-15.23	-20.11	-21.16	-21.32	-19.68	120.06	119.98	119.48	119.64	0.57
260	-7.03	-7.14	-7.18	-7.08	1.08	0.15	-18.52	-29.45	-18.70	-22.30	-20.05	-21.25	-21.39	-19.69	92.03	92.17	91.65	91.57	0.60
280	-7.20	-7.30	-7.33	-7.24	1.25	0.13	-19.48	-34.33	-19.61	-18.27	-19.24	-20.55	-20.67	-18.98	60.98	61.33	60.73	60.41	0.92
300	-7.49	-7.57	-7.61	-7.53	1.53	0.12	-19.49	-31.60	-19.37	-21.95	-18.87	-20.12	-20.14	-18.61	25.30	25.91	25.11	24.57	1.34

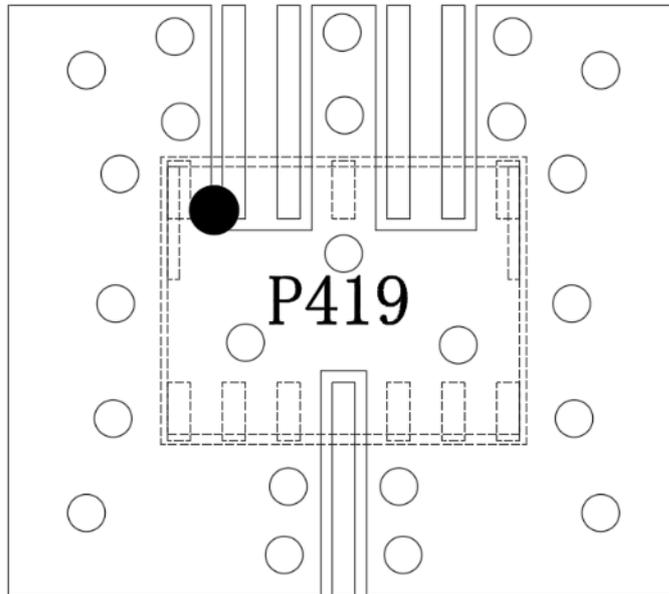
Typical Electrical Characteristics (T=-40°C,25°C,65°C,85°C)



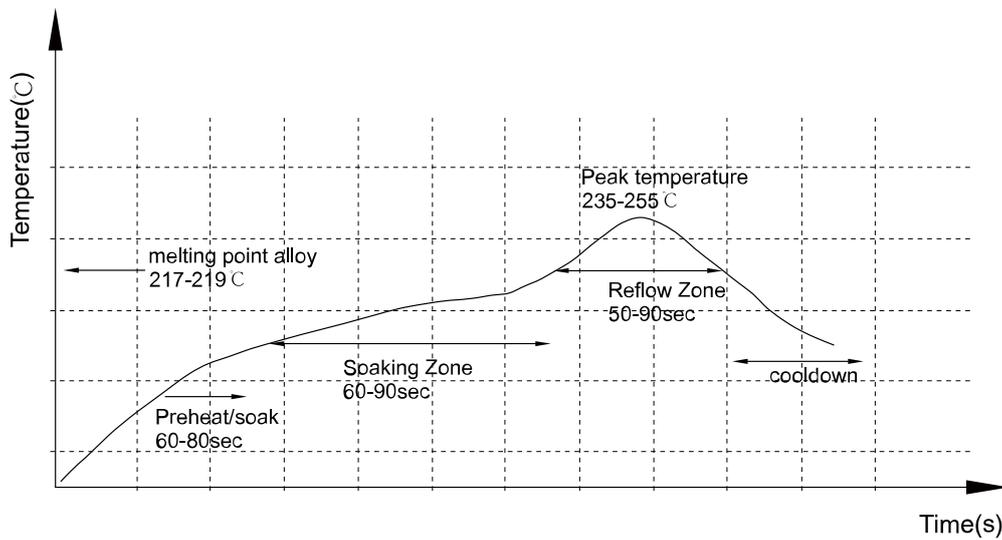
Typical Electrical Characteristics (T=-40°C,25°C,65°C,85°C)


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


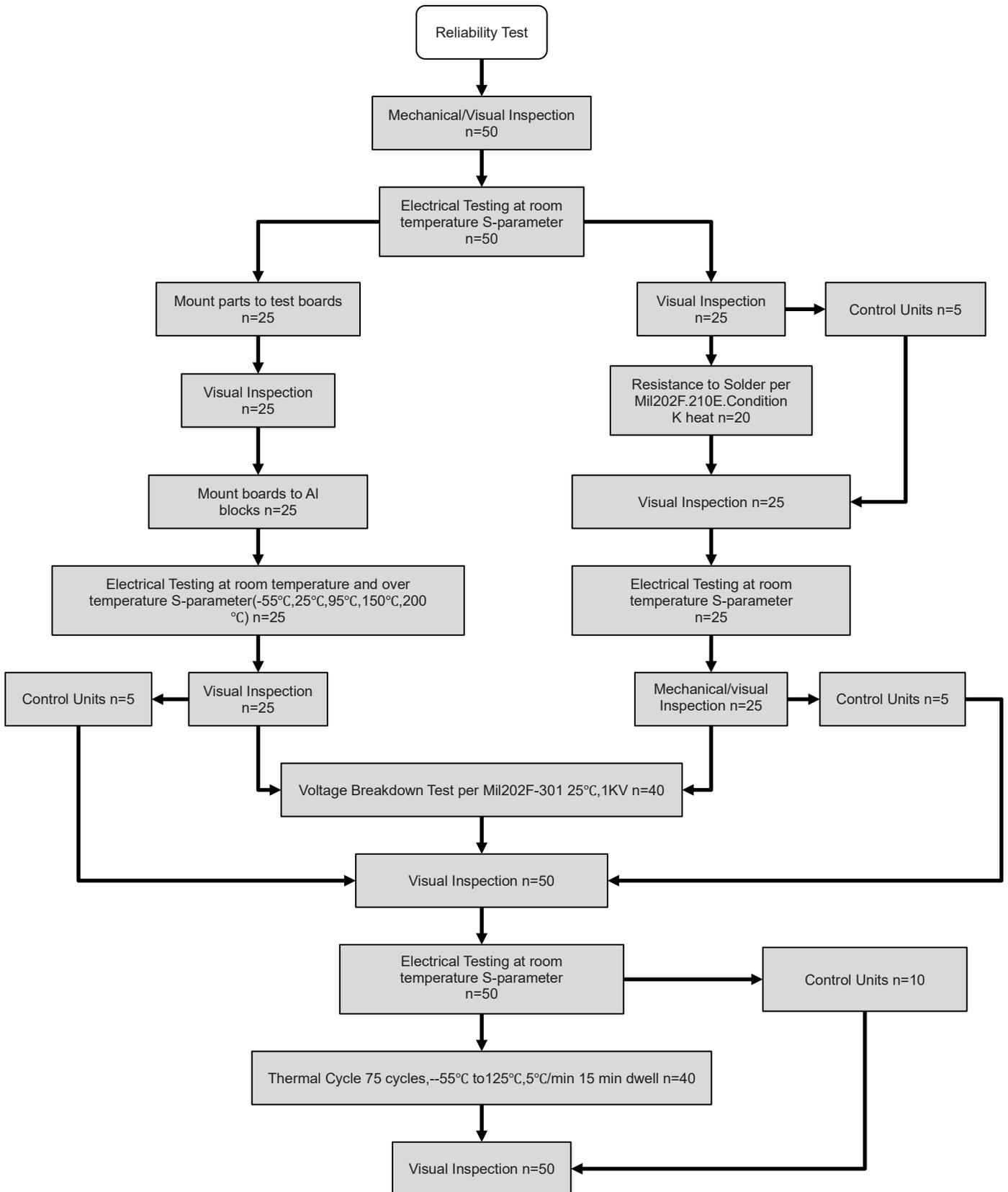
Mounting Considerations



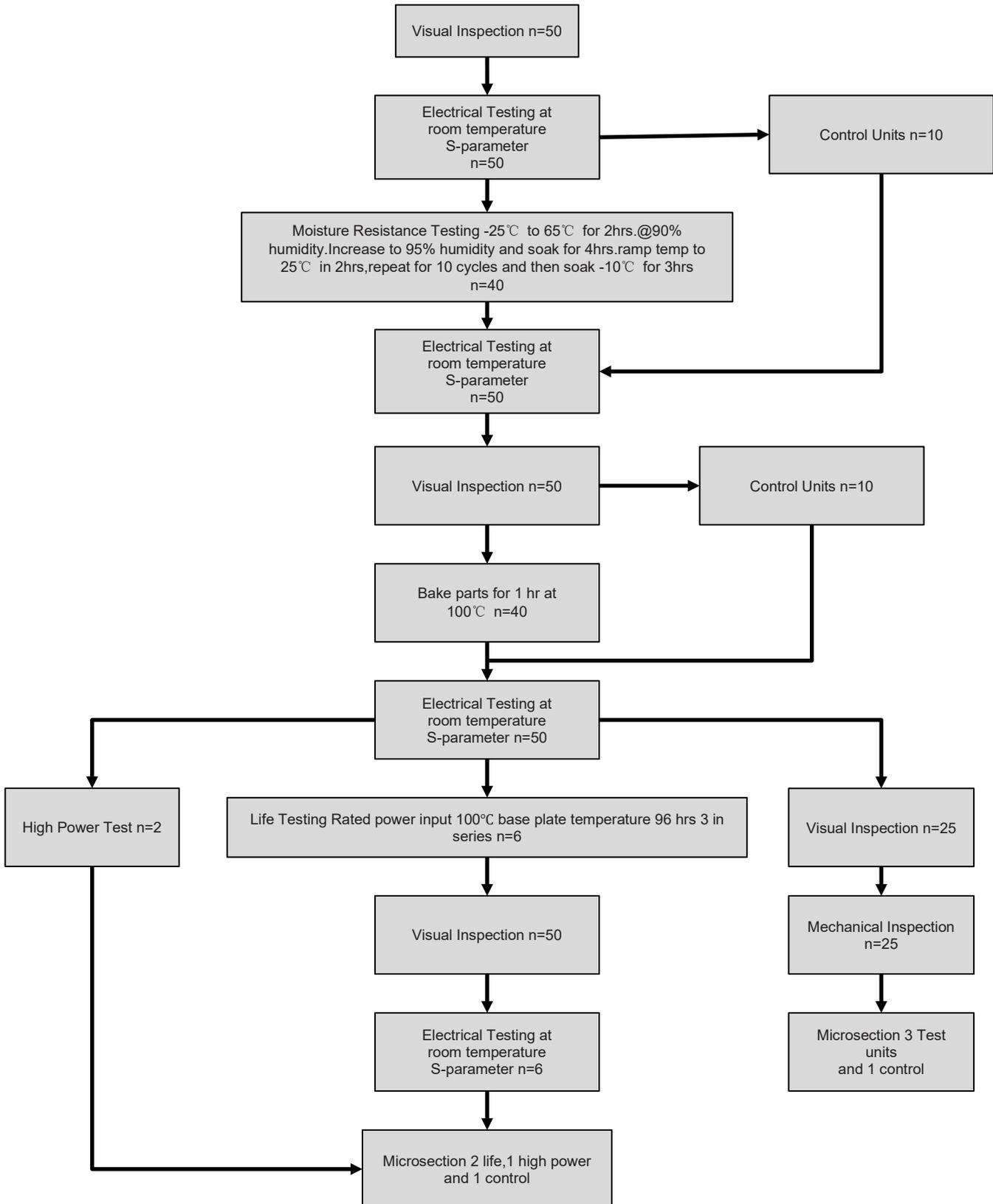
Reflow Profile



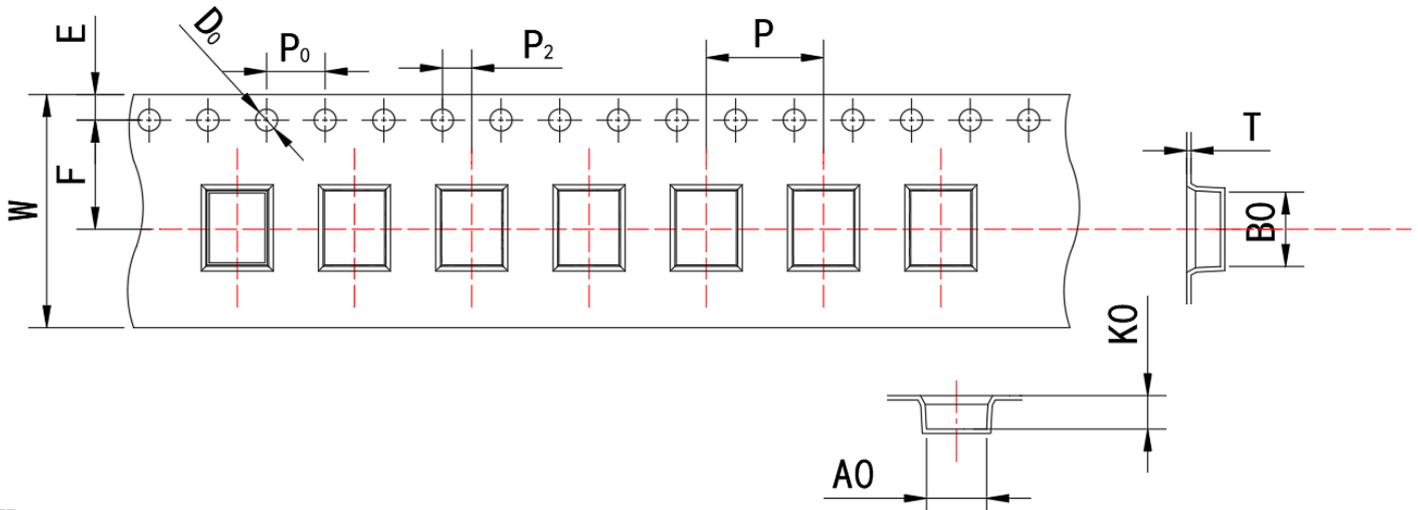
Reliability Test Flow



Reliability Test Flow



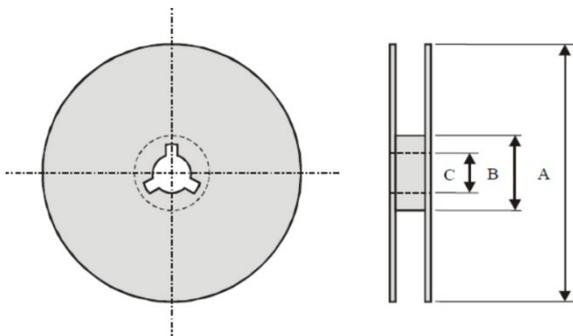
Plastic Tape specifications (unit: mm)



Index	A0	B0	ØD	T	W	E	F	P	P0	P2
Dimension (mm)	4.1 ± 0.1	5.1 ± 0.1	1.50+01/0	0.3±0.05	16.0 ± 0.3	1.75 ± 0.1	7.50 ± 0.1	8.0 ± 0.1	4.0±0.1	2.00 ± 0.1
Index	K0									
Dimension (mm)	2.30±0.1									

NOTE :

- 10 sprocket hole pitch cumulative tolerance is ±0.20mm.
- 1mm maximum camber in 100mm long for carrier.
- K0 be measured from the top carrier surface to the bottom surface inside the tape pocket.
- All dimension scopes are in term of EIA-481-C STANDARD.
- Material: Transparent Anti-static Polystyrene.



Index	A	B	C
Dimension (mm)	Ø178.0	Ø60.0	Ø13.2

Taping Quantity: 1200 pieces per 7" reel