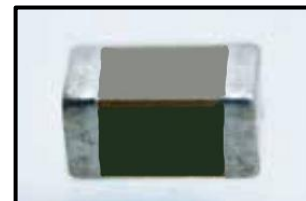


≠ Features

- Excellent volumetric efficiency and stability of capacitance with temperature
- High voltage capacitors
- Special internal electrode design for high voltage rating
- Surface mount suitable for wave and reflow soldering
- High Reliability
- RoHS Compliant

≠ Applications

- LAN/WLAN interface
- Back-lighting inverter, DC-DC converters
- Ballast, Modems and Power Supplies



≠ Part Numbering

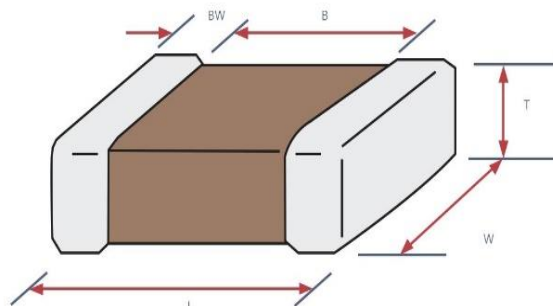
PPI-CHV	1812	N	2K0	101	J	C	T
PPI Series	Case Size	Termination Code <i>See Table</i>	Rated Voltage <i>See Table</i>	Capacitor Code 101 = 100pF 100 = 10pF 1R0 = 1.0pF	Capacitance Tolerance: <i>See Table</i>	Dielectric <i>See Table</i>	Packaging T = Tape & Reel



≠ Dimensions (mm)

Dimensions (mm)					
Size	L	W	T	B (min)	BW (min)
1812	4.60 ± 0.30	3.20 ± 0.20	*	2.50	0.30

* See Capacitance Range charts on following pages



Please note that the contents of this document are subject to change at any time at PPI's sole discretion. The most up-to-date version of this document is available at www.passiveplus.com

**≠ Terminations**

Code	Description
F	Silver Palladium
N	Nickel Barrier
A	High Leach Resistant Silver Palladium

≠ Rated Voltages

Code	Voltage	Code	Voltage	Code	Voltage
250	250V	1K0	1KV	4K0	4KV
500	500V	2K0	2KV	5K0	5KV
630	630V	3K0	3KV	6K0	6KV

≠ Capacitance Codes

Cap Code	Value	Cap Code	Value	Cap Code	Value	Cap Code	Value
5R0	5.0pF	101	100pF	103	10nF	105	1.0uF
100	10pF	102	1.0nF	104	100nF		

≠ Capacitance Tolerances

Code	B	C	F	G	J	K	M
Tol.	±0.1pF	±0.25pF	±1%	±2%	±5%	±10%	±20%

≠ Dielectric Codes

Code	C	X
	COG	X7R

≠ Performance

Dielectric Classification	C = COG / NP0 (Ultra Stable)	X = X7R (Stable)
Operating Temperature	-55°C to 125°C	-55°C to 125°C
Rated Voltage	250V – 6000V	250V – 6000V
Temperature Coefficient	≤±30ppmi/°C, -55°C ~+125°C (EIA Class I)	≤±15ppmi/°C, -55°C ~+125°C (EIA Class II)
Dissipation Factor	NP0: Q>1000	X7R: D.F. ≤2.5%
Insulation Resistance	10GΩ or 500/CΩ whichever is smaller	
Aging	NP0: 0%	X7R: Typically, 1.0% per decade of time
Dielectric Strength	100 ≤ V < 500V, 200% Rated Voltage 500 ≤ V < 1000V, 150% Rated Voltage 1000 ≤ V, 120% Rated Voltage	



CHV Series

PPI-CHV1812**⚡ PPI-CHV SERIES: 1812**

Dielectric		COG								X7R								
T (max)		1.8	1.8	2.6	2.2	2.6	2.6	2.6	2.6	2.7	2.6	3.0	3.0	1.8	2.2	2.7	2.7	2.7
Rated Voltage		250	500	630	1000	2000	3000	4000	5000	6000	250	500	1000	2000	3000	4000	5000	6000
Cap Value	Code																	
2.0pF	2R0																	
3.3pF	3R3																	
3.9pF	3R9																	
5.0pF	5R0																	
8.2	8R2																	
10	100																	
12	120																	
15	150																	
18	180																	
22	220																	
27	270																	
33	330																	
39	390																	
47	470																	
56	560																	
68	680																	
82	820																	
100	101																	
120	121																	
150	151																	
180	181																	
220	221																	
270	271																	
330	331																	
390	391																	
470	471																	
560	561																	
680	681																	
820	821																	
1.0nF	102																	
1.2	122																	
1.5	152																	
1.8	182																	
2.2	222																	
2.7	272																	
3.3	332																	
3.9	392																	
4.7	472																	
5.6	562																	
6.8	682																	
8.2	822																	



CHV Series

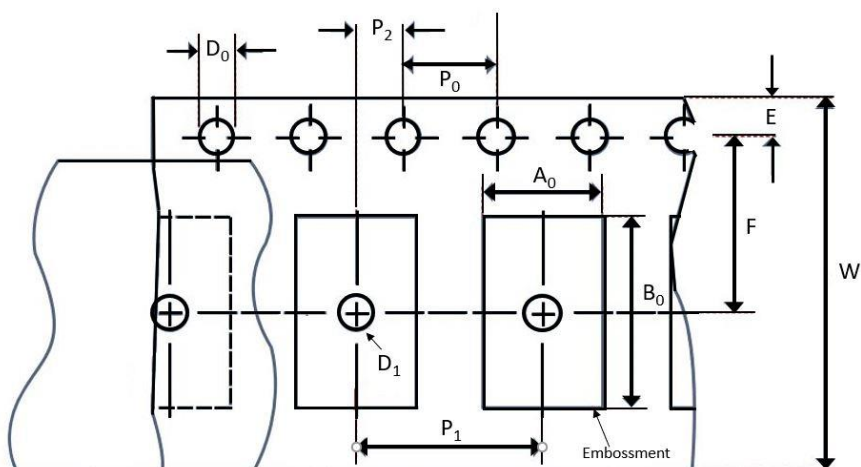
PPI-CHV1812**⚡ PPI-CHV SERIES: 1812**

Dielectric		COG								X7R								
T (max)		1.8	1.8	1.8	2.6	2.2	2.6	2.6	2.6	2.7	2.6	3.0	3.0	1.8	2.2	2.7	2.7	2.7
Rated Voltage		250	500	630	1000	2000	3000	4000	5000	6000	250	500	1000	2000	3000	4000	5000	6000
Cap Value	Code																	
10	103																	
12	123																	
15	153																	
18	183																	
22	223																	
27	273																	
33	333																	
39	393																	
47	473																	
56	563																	
68	683																	
82	823																	
100	104																	
124	124																	
154	154																	
184	184																	
224	224																	
274	274																	
334	334																	
394	394																	
474	474																	
564	564																	
684	684																	
824	824																	
1.0uF	105																	
2.2	225																	

Packaging: Embossed Plastic Carrier Tape

Size	Qty per 7" Reel	Qty 10/13" Reel
1812	500, 1000	2K

Tape & Reel Specifications



Unit: mm

Size	W	P ₀	P ₁	P ₂	D ₀	D ₁	E	F
1812	12.00 ± 0.30	4.00 ± 0.10	8.00 ± 0.10	2.00 ± 0.05	1.50 ± 0.10	1.00 ± 0.10	1.75 ± 0.10	5.50 ± 0.05

 $A_0 B_0$

- Determined by component size to minimize rotation.
- The component cannot rotate more than 20° within the determined cavity.