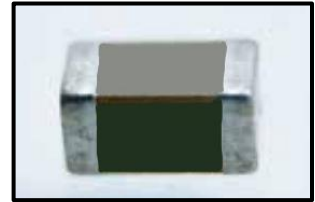


### ≠ Features

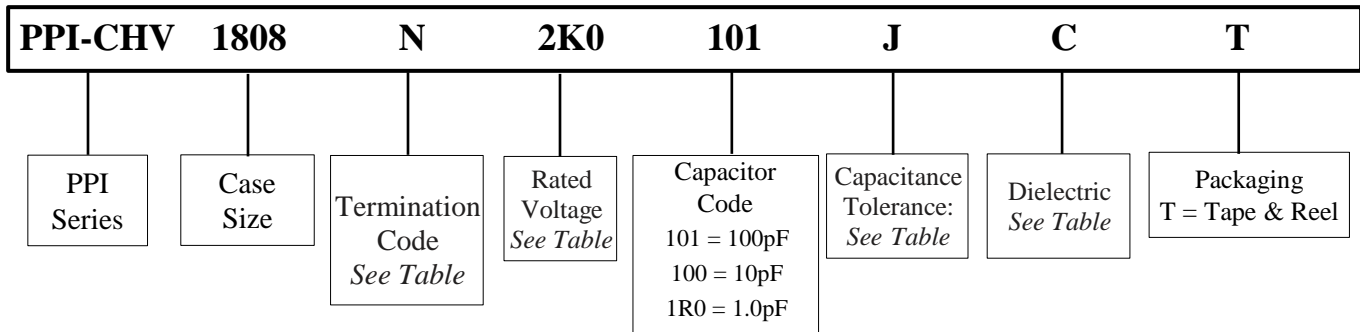
- Excellent volumetric efficiency and stability of capacitance with temperature
- High voltage capacitors
- Special internal electrode design for high voltage rating
- Surface mount suitable for wave and reflow soldering
- High Reliability
- RoHS Compliant

### ≠ Applications

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



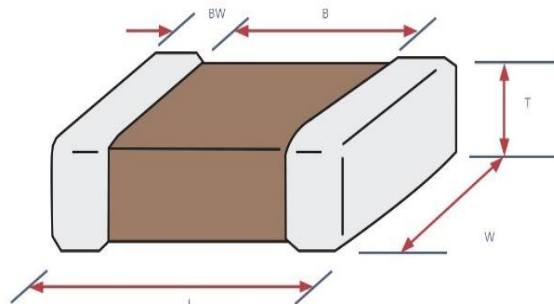
### ≠ Part Numbering



### ≠ Dimensions (mm)

Dimensions (mm)					
Size	L	W	T	B (min)	BW (min)
<b>1808</b>	4.60 ± 0.30	2.00 ± 0.20	*	2.50	0.30

\* See Capacitance Range charts on following pages





## ≠ Terminations

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

## ≠ Rated Voltages

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

## ≠ Capacitance Codes

Cap Code	Value	Cap Code	Value	Cap Code	Value
5R0	5.0pF	101	100pF	103	10nF
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 – 5000V	250V – 4000V
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	



**± PPI-CHV SERIES: 1808**

Dielectric		COG								X7R					
T (max)		1.8			2.2					2.2					
Rated Voltage		250	500	630	1000	2000	3000	4000	5000	250	500	1000	2000	3000	4000
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														



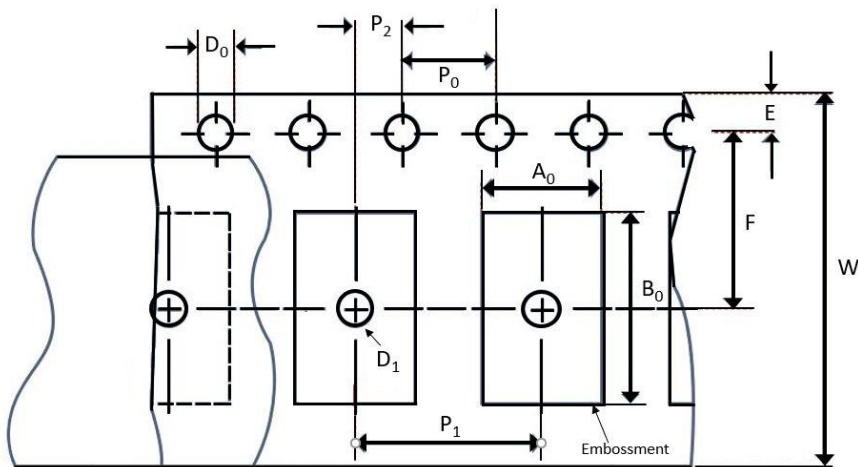
**± PPI-CHV SERIES: 1808**

Dielectric		COG								X7R					
T (max)		1.8			2.2					2.2					
Rated Voltage		250	500	630	1000	2000	3000	4000	5000	250	500	1000	2000	3000	4000
Cap Value	Code														
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														
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														

**≠ Packaging: Embossed Plastic Carrier Tape**

Size	Qty per 7" Reel	Qty 10/13" Reel
<b>1808</b>	1K, 2K, 3K	4K

**≠ Tape & Reel Specifications**



Unit: mm

Size	W	$P_0$	$P_1$	$P_2$	$D_0$	$D_1$	E	F
1808	$12.00 \pm 0.30$	$4.00 \pm 0.10$	$8.00 \pm 0.10$	$2.00 \pm 0.05$	$1.50 \pm 0.10$	$1.00 \pm 0.10$	$1.75 \pm 0.10$	$5.50 \pm 0.05$

$A_0 B_0$

- Determined by component size to minimize rotation.
- The component cannot rotate more than  $20^\circ$  within the determined cavity.