



**Author:** Gerald Tatschl  
**Tel:** +43 463 3834 314  
**E-mail:** [Gerald.Tatschl@Vishay.com](mailto:Gerald.Tatschl@Vishay.com)

## New Conductive and Hybrid Conductive Aluminum Polymer Capacitors Save PCB Space and Lower Costs

*Devices Deliver Longer Useful Life, Higher Ripple Current, and Lower Impedance Than Standard Aluminum Capacitors*

### Product Benefits:

- Available in case sizes from 4 mm by 4 mm by 5.5 mm to 10 mm by 10 mm by 12.4 mm
- Conductive capacitors:
  - Useful life to 5000 hours at +105 °C
  - Ripple current to 5600 mA
  - ESR down to 9 mΩ
- Hybrid conductive capacitors:
  - Lifetime to 10 000 hours at +105 °C
  - Ripple current to 2500 mA
  - ESR down to 20 mΩ
- Available in AEC-Q200 qualified versions on request
- RoHS-compliant



### Market Applications:

- Conductive devices: mobile devices and consumer and telecom applications
- Hybrid conductive devices: automotive and industrial applications

### Buy It Now

Check distributor stock on the Vishay website:

[182 CPHZ](#)  
[183 CPHT](#)  
[184 CPHS](#)  
[185 CPHZ](#)  
[186 CPNT](#)



## The News:

Vishay Intertechnology introduces new conductive (184 CPNS, 185 CPNZ, and 186 CPNT series) and hybrid conductive (182 CPHZ and 183 CPHT series) aluminum polymer capacitors in a variety of case sizes ranging from 4 mm by 4 mm by 5.5 mm to 10 mm by 10 mm by 12.4 mm. The Vishay BCcomponents devices offer longer lifetimes than standard aluminum capacitors, while providing higher ripple current and better impedance.

- Low inductance saves PCB space and lowers costs
- Support automatic placement and high temperature reflow soldering in accordance with JEDEC

## The Key Specifications:

Series	182 CPHZ	183 CPHT	184 CPNS	185 CPNZ	186 CPNT
Type	Hybrid conductive	Hybrid conductive	Conductive	Conductive	Conductive
Rated ripple current at 100 kHz (mA)	750 to 2500	500 to 2000	700 to 5600	980 to 5300	980 to 5100
ESR at 100 kHz (mΩ)	20 to 120	20 to 120	9 to 100	12 to 75	15 to 75
Useful life (h) at max. temp.	10 000	4000	2000	5000	2000
Case sizes (mm)	5 x 5 x 5.8 to 10 x 10 x 10.5	5 x 5 x 5.8 to 10 x 10 x 10.5	4 x 4 x 5.5 to 10 x 10 x 12.4	6.3 x 6.3 x 5.8 to 10 x 10 x 12.4	6.3 x 6.3 x 5.8 to 10 x 10 x 12.4
Capacitance range (μF)	10 to 330	10 to 330	4.7 to 3300	10 to 1500	10 to 1500
Tolerance (%)	± 20				
Voltage range (V)	25 to 80	25 to 80	2.5 to 100	6.3 to 50	6.3 to 50
Temp. range (°C)	-55 to +105	-55 to +125	-55 to +105	-55 to +105	-55 to +125

### Availability:

Samples and production quantities of the 182 CPHZ, 183 CPHT, 184 CPNS, 185 CPNZ, and 186 CPNT are available now, with lead times of 12 to 16 weeks for large orders.

To access the product datasheets on the Vishay Website, go to:

<http://www.vishay.com/ppg?28433> (182 CPHZ).

<http://www.vishay.com/ppg?28434> (183 CPHT)

<http://www.vishay.com/ppg?28437> (184 CPHS)

<http://www.vishay.com/ppg?28436> (185 CPHZ)

<http://www.vishay.com/ppg?28435> (186 CPNT)

### Contact Information:

#### THE AMERICAS

Walter Bonomo  
[Walter.Bonomo@Vishay.com](mailto:Walter.Bonomo@Vishay.com)

#### EUROPE

Gerald Tatschl  
[Gerald.Tatschl@Vishay.com](mailto:Gerald.Tatschl@Vishay.com)

#### ASIA/PACIFIC

BH Tan  
[Boonhooi.Tan@Vishay.com](mailto:Boonhooi.Tan@Vishay.com)