

## Hybrid Conductive Polymer Aluminum Capacitors SMD (Chip), Low Impedance



### KEY BENEFITS

- High temperature range: up to 125 °C
- Soldering heat resistant up to 240 °C peak temperature
- Very low impedance down to 0.012  $\Omega$  (at 20 °C, 100 kHz)
- Highest ripple currents up to 2500 mA (at 105 °C, 100 kHz)
- Very long useful life: up to 10 000 h at 105 °C or 4000 h at 125 °C

### APPLICATIONS

- Automotive applications
- High performance applications in telecommunications and IT
- Industrial applications: motion control, SMPS, automation systems, equipment for renewable energy
- Applications where very low impedances are required
- Efficient portable or mobile equipment

### RESOURCES

- Datasheet: 182 CPHZ - [www.vishay.com/doc?28433](http://www.vishay.com/doc?28433)  
183 CPHT - [www.vishay.com/doc?28434](http://www.vishay.com/doc?28434)
- For technical questions, contact [aluminumcaps1@vishay.com](mailto:aluminumcaps1@vishay.com)
- Material categorization: for definitions of compliance, please see to [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



### 182 CPHZ Overview

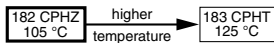


Fig. 1

#### FEATURES

- Long useful life: up to 10 000 h at 105 °C
- Very low ESR and high ripple current
- High voltages up to 80 V
- SMD-version with base plate, lead (Pb)-free reflow solderable
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)

#### APPLICATIONS

- Automotive electronics
- Industrial and professional applications
- Telecommunications and IT
- Portable and mobile equipment

QUICK REFERENCE DATA	
DESCRIPTION	VALUE
Nominal case sizes (L x W x H in mm)	5.0 x 5.0 x 5.8 to 10.0 x 10.0 x 10.5
Rated capacitance range, C <sub>R</sub>	10 µF to 330 µF
Tolerance on C <sub>R</sub>	± 20 %
Rated voltage range, U <sub>R</sub>	25 V to 80 V
Category temperature range	-55 °C to +105 °C
Endurance test at 105 °C	10 000 h
Useful life at 105 °C	10 000 h
Shelf life at 0 V, 105 °C	1000 h
Based on sectional specification	IEC 60384-25 / CECC 32300
Climatic category IEC 60068	55 / 105 / 56

Revision 22-Sep-17

### 183 CPHT Overview

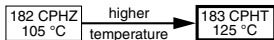


Fig. 1

#### FEATURES

- Long useful life: up to 4000 h at 125 °C
- Very low ESR and high ripple current
- High voltages up to 80 V
- SMD-version with base plate, lead (Pb)-free reflow solderable
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)

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Tolerance on C <sub>R</sub>	± 20 %
Rated voltage range, U <sub>R</sub>	25 V to 80 V
Category temperature range	-55 °C to +125 °C
Endurance test at 125 °C	4000 h
Useful life at 125 °C	4000 h
Shelf life at 0 V, 125 °C	1000 h
Based on sectional specification	IEC 60384-25 / CECC 32300
Climatic category IEC 60068	55 / 125 / 56

Revision 22-Sep-17