

# **ALUMINUM CAPACITORS**

# 184 CPNS / 185 CPNZ / 186 CPNT

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



#### **KEY BENEFITS**

- High temperature range: up to 125 °C
- Soldering heat resistant up to 250 °C peak temperature
- Very low ESR: down to 0.009 Ω (at 20 °C, 100 kHz)
- Highest ripple currents up to 5600 mA (at 105 °C, 100 kHz)
- Very long useful life: up to 2000 h at 125 °C, or 2 000 000 h at 65 °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: 184 CPNS - <u>www.vishay.com/doc?28437</u>
Datasheet: 185 CPNZ - <u>www.vishay.com/doc?28436</u>
Datasheet: 186 CPNT - <u>www.vishay.com/doc?28435</u>

- For technical questions, contact <u>aluminumcaps1@vishay.com</u>
- Material categorization: for definitions of compliance, please see to www.vishay.com/doc?99912





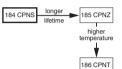


# **ALUMINUM CAPACITORS**

## 184 CPNS / 185 CPNZ / 186 CPNT

### **184 CPNS**





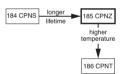
#### **FEATURES**

- Useful life: up to 2000 h at 10
- Very low ESR and high ripple current
- High voltages up to 100 V
- SMD-version with base plate, lead (Pb)-free solderable
- Material categorization: for definitions of compliance please see <a href="https://www.vishay.com/doc?99912">www.vishay.com/doc?99912</a>

QUICK REFERENCE DATA	
DESCRIPTION	VALUE
Nominal case sizes (L x W x H in mm)	4.0 x 4.0 x 5.5 to 10.0 x 10.0 x 12.4
Rated capacitance range, C <sub>R</sub>	4.7 μF to 3300 μF
Tolerance on C <sub>R</sub>	± 20 %
Rated voltage range, U <sub>R</sub>	2.5 V to 100 V
Category temperature range	-55 °C to +105 °C
Endurance test at 105 °C	2000 h
Useful life at 105 °C	2000 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

# **185 CPNZ**





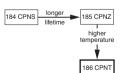
#### **FEATURES**

- Extended useful life: up to 5000 h at 105 °C
- Very low ESR and high ripple current
- Voltages up to 50 V
- SMD-version with base plate, lead (Pb)-free reflow solderable
- Material categorization: for definitions of compliance please see <a href="https://www.vishay.com/doc?99912">www.vishay.com/doc?99912</a>

QUICK REFERENCE DATA	
DESCRIPTION	VALUE
Nominal case sizes (L x W x H in mm)	6.3 x 6.3 x 5.8 to 10.0 x 10.0 x 12.4
Rated capacitance range, C <sub>R</sub>	10 μF to 1500 μF
Tolerance on C <sub>R</sub>	± 20 %
Rated voltage range, U <sub>R</sub>	6.3 V to 50 V
Category temperature range	-55 °C to +105 °C
Endurance test at 105 °C	5000 h
Useful life at 105 °C	5000 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

#### **186 CPNT**





#### **FEATURES**

- Useful life: up to 2000 h at 125 °C
- Very low ESR and high ripple current
- Voltages up to 50 V
- SMD-version with base plate, lead (Pb)-free reflow solderable
- Material categorization: for definitions of compliance please see <a href="https://www.vishay.com/doc?99912">www.vishay.com/doc?99912</a>

QUICK REFERENCE DATA	
DESCRIPTION	VALUE
Nominal case sizes (L x W x H in mm)	6.3 x 6.3 x 5.8 to 10.0 x 10.0 x 12.4
Rated capacitance range, C <sub>R</sub>	10 μF to 1500 μF
Tolerance on C <sub>R</sub>	± 20 %
Rated voltage range, U <sub>R</sub>	6.3 V to 50 V
Category temperature range	-55 °C to +125 °C
Endurance test at 125 °C	2000 h
Useful life at 125 °C	2000 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