

Conductive Polymer Aluminum Capacitors SMD (Chip), Low Impedance



KEY BENEFITS

- High temperature range: up to 105 °C
- Soldering heat resistant acc. to IPC/JEDEC J-STD-020 on request
- Very low impedance down to 0.012 Ω (at 20 °C, 100 kHz)
- Highest ripple currents up to 5400 mA (at 105 °C, 100 kHz)
- Very long useful life: up to 5000 h at 105 °C

APPLICATIONS

- High-performance applications in telecommunication 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: 181 CPL - www.vishay.com/doc?28417
- For technical questions contact aluminumcaps1@vishay.com
- Material categorization: For definitions of compliance, please see to www.vishay.com/doc?99912



RoHS
COMPLIANT

A **WORLD OF**
SOLUTIONS

Conductive Polymer Aluminum Capacitors SMD (Chip), Low Impedance

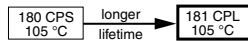


Fig. 1

QUICK REFERENCE DATA	
DESCRIPTION	VALUE
Nominal case sizes (L x W x H in mm)	6.6 x 6.6 x 5.9 to 10.4 x 10.4 x 12.6
Rated capacitance range, C _R	18 µF to 820 µF
Tolerance on C _R	± 20 %
Rated voltage range, U _R	4.0 V to 35 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 60384-18 / CECC 32300
Climatic category IEC 60068	55/105/56

FEATURES

- Long useful life: up to 5000 h at 105 °C
- Very low ESR and highest ripple current
- SMD-version with base plate, lead (Pb)-free reflow solderable

APPLICATIONS

- SMD technology, for high temperature reflow soldering
- Industrial and professional applications
- Telecommunications and IT
- Portable and mobile equipment

MARKING

- Rated capacitance (in µF)
- Rated voltage (in V)
- Date code, in accordance with IEC 60062
- Blue mark or “-” sign indicating the cathode (the anode is identified by bevelled edges)
- Code indicating group number (L)

PACKAGING

Supplied in blister tape on reel

SELECTION CHART FOR C _R , U _R AND RELEVANT NOMINAL CASE SIZES (L x W x H in mm)							
C _R (µF)	U _R (V)						
	4.0	6.3	10	16	20	25	35
18	→	→	→	→	→	→	6.6 x 6.6 x 5.9
39	→	→	→	6.6 x 6.6 x 5.9	-	-	-
47	→	→	→	→	→	6.6 x 6.6 x 5.9	-
56	→	→	6.6 x 6.6 x 5.9	→	6.6 x 6.6 x 5.9	-	-
68	→	→	6.6 x 6.6 x 5.9	6.6 x 6.6 x 5.9	-	-	-
82	→	→	→	8.4 x 8.4 x 6.7	→	→	8.4 x 8.4 x 12
100	→	6.6 x 6.6 x 5.9	→	10.4 x 10.4 x 7.7	-	-	-
120	→	6.6 x 6.6 x 5.9	6.6 x 6.6 x 5.9	8.4 x 8.4 x 6.7	-	-	-
150	6.6 x 6.6 x 5.9	→	8.4 x 8.4 x 6.7 10.4 x 10.4 x 7.7	8.4 x 8.4 x 6.7	→	8.4 x 8.4 x 12	10.4 x 10.4 x 12.6
180	→	→	→	10.4 x 10.4 x 7.7	-	-	-
220	→	6.6 x 6.6 x 5.9 8.4 x 8.4 x 6.7	-	-	-	-	-
270	8.4 x 8.4 x 6.7	→	8.4 x 8.4 x 6.7	→	8.4 x 8.4 x 12	10.4 x 10.4 x 12.6	-
330	6.6 x 6.6 x 5.9 8.4 x 8.4 x 6.7	→	10.4 x 10.4 x 7.7	-	-	-	-
390	→	8.4 x 8.4 x 6.7	→	→	8.4 x 8.4 x 12	-	-
470	→	10.4 x 10.4 x 7.7	→	→	10.4 x 10.4 x 12.6	-	-
560	8.4 x 8.4 x 6.7	-	-	-	-	-	-
680	10.4 x 10.4 x 7.7	-	-	-	-	-	-
820	→	→	→	10.4 x 10.4 x 12.6	-	-	-

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