

## 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 0.009  $\Omega$  (at 20 °C, 100 kHz)
- Highest ripple currents up to 6100 mA (at 105 °C, 100 kHz)
- Long useful life: up to 2500 h at 105 °C

### 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: 180 CPS - [www.vishay.com/doc?28415](http://www.vishay.com/doc?28415)
- 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)



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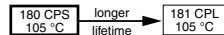


Fig. 1

QUICK REFERENCE DATA	
DESCRIPTION	VALUE
Nominal case sizes (L x W x H in mm)	5.3 x 5.3 x 5.7 to 10.4 x 10.4 x 12.6
Rated capacitance range, C <sub>R</sub>	22 µF to 2700 µF
Tolerance on C <sub>R</sub>	± 20 %
Rated voltage range, U <sub>R</sub>	2.5 V to 35 V
Category temperature range	-55 °C to +105 °C
Endurance test at 105 °C	2000 h
Useful life at 105 °C	2500 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

- Useful life: up to 2500 h at 105 °C
- Very low ESR and highest ripple current
- 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

- 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 (S)

#### PACKAGING

Supplied in blister tape on reel

SELECTION CHART FOR C <sub>R</sub> , U <sub>R</sub> , AND RELEVANT NOMINAL CASE SIZES (L x W x H in mm)								
C <sub>R</sub> (µF)	U <sub>R</sub> (V)							
	2.5	4.0	6.3	10	16	20	25	35
22	→	→	→	→	→	→	→	6.6 x 6.6 x 5.9
39	→	→	→	→	5.3 x 5.3 x 5.7 6.6 x 6.6 x 5.9	-	-	-
56	→	→	→	→	→	→	6.6 x 6.6 x 5.9	-
68	→	→	→	5.3 x 5.3 x 5.7	6.6 x 6.6 x 5.9	-	-	-
82	→	→	→	→	→	→	→	8.4 x 8.4 x 12
100	→	→	→	→	6.6 x 6.6 x 5.9	-	-	-
120	→	→	5.3 x 5.3 x 5.7	6.6 x 6.6 x 5.9	→	6.6 x 6.6 x 5.9	→	10.4 x 10.4 x 12.6
150	→	5.3 x 5.3 x 5.7	→	6.6 x 6.6 x 7.7	8.4 x 8.4 x 6.7	-	-	-
180	5.3 x 5.3 x 5.7	→	→	→	→	→	8.4 x 8.4 x 12	-
220	→	→	6.6 x 6.6 x 5.9	→	10.4 x 10.4 x 7.7	-	-	-
270	→	6.6 x 6.6 x 5.9	→	→	8.4 x 8.4 x 12	-	-	-
330	→	6.6 x 6.6 x 5.9	6.6 x 6.6 x 5.9 6.6 x 6.6 x 7.7	→	10.4 x 10.4 x 12.6	→	10.4 x 10.4 x 12.6	-
390	6.6 x 6.6 x 5.9	6.6 x 6.6 x 7.7	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	6.6 x 6.6 x 5.9 6.6 x 6.6 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	-	-
680	8.4 x 8.4 x 6.7	-	-	-	-	-	-	-
820	8.4 x 8.4 x 12	→	8.4 x 8.4 x 12 10.4 x 10.4 x 7.7	→	10.4 x 10.4 x 12.6	-	-	-
1000	→	10.4 x 10.4 x 7.7	-	-	-	-	-	-
1200	10.4 x 10.4 x 7.7	8.4 x 8.4 x 12	-	-	-	-	-	-
1500	8.4 x 8.4 x 12	8.4 x 8.4 x 12	10.4 x 10.4 x 12.6	-	-	-	-	-
2200	→	10.4 x 10.4 x 12.6	-	-	-	-	-	-
2700	10.4 x 10.4 x 12.6	-	-	-	-	-	-	-

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