

Capacitor Type

CB4G



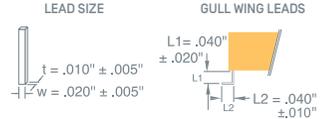
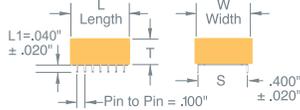
Electrical Schematic



Non-polarized

Second Generation High Frequency Switching Power Supply Capacitors

- Ideal for 48 volt bus input & output
- Low impedance (ESR/ESL) construction
- Self-healing—Avoids shorts
- The reliable solution to ceramic and tantalum capacitor faults at elevated voltage
- Made for >100KHz switching power trains and reflected RFI
- Flat surface for pick and place
- Surface-mount capability
- Operating temperature range: -55°C to 125°C
- High ripple current/High capacitance
- Volumetrically efficient
- Made in U.S.A.



100 VDC / 80 VAC

PF Code	Value μ F	W Max	T Max	L Max	ESR @500 KHz	RMS Current @500 KHz (A)	# Leads per side	Lead Configuration	Case	Part Number
405	4.0	0.500 (12.7)	0.250 (6.3)	0.450 (11.4)	0.007	11.5	3	SMD	CB4G	405K100CB4G_--
475	4.7	0.500 (12.7)	0.250 (6.3)	0.525 (13.3)	0.006	12.2	3	SMD	CB4G	475K100CB4G_--
106	10.0	0.500 (12.7)	0.250 (6.3)	0.995 (25.3)	0.003	15.3	7	SMD	CB4G	106K100CB4G_--

Dimensions in inches, metric (mm) in parenthesis.

Tolerance: K ($\pm 10\%$) standard, J ($\pm 5\%$) available

RoHS part number information: _____

No suffix indicates RoHS-5 compliant standard part number. RoHS-5 product does not contain five of the RoHS banned materials (Hg, CrVI, Cd, PBB and PBDE) in levels exceeding the industry defined limits.

Component lead wires are plated with Sn / Pb and match conventional Sn/Pb board assembly requirements.

For a RoHS-6 compliant part, add a -FA suffix. RoHS-6 product does not contain any of the six RoHS banned materials (Hg, CrVI, Cd, PBB, PBDE and Pb) in levels exceeding the industry defined limits.

Component lead wires are plated with Sn.

Electrical	Performance	Physical				
<p>Capacitance Range: 2.0 μF to 10.0 μF @ 1KHz</p> <p>Tolerance: Available in K ($\pm 10\%$) standard</p> <p>Voltage Range: 100 VDC</p> <p>Dissipation Factor: $\leq 1.0\%$ @ 25°C, 1KHz</p> <p>Insulation Resistance: $\geq 1,000$ Megohms $\times \mu$F Need not exceed 1,000 Megohms.</p> <table border="1"> <tr> <td>Rated Voltage</td> <td>≤ 100 VDC</td> </tr> <tr> <td>Test Voltage</td> <td>10 VDC</td> </tr> </table> <p>Temperature Coefficient: +6% from -55°C to 85°C</p> <p>Dielectric Strength: 1.3 \times rated voltage</p> <p>Self Inductance: < 4nH (Typical) CB4</p> <p>Temperature Range: -55°C to 125°C, derate voltage 1.25% / °C above 85°C</p>	Rated Voltage	≤ 100 VDC	Test Voltage	10 VDC	<p>Accelerated DC Voltage Life Test: 1,000 Hours, 85°C, $1.25 \times$ Rated VDC Δ C/C $\leq 5\%$ DF $\leq 1.0\%$, 1KHz, 25°C IR $\geq 1,000$ Megohm $\times \mu$F Need not exceed 1,000 Megohms</p> <p>Moisture/Humidity Test: 85°C / 85% RH / 21 days Applied Voltage: zero bias Δ C/C $\leq 7\%$ DF $\leq 1.0\%$, 1KHz, 25°C IR $\geq 30\%$ of initial limit</p> <p>Long Term Stability: After 2 years storage, standard environment Δ C/C $\leq 2\%$</p>	<p>Construction: Non-inductively constructed with metallized poly- ester dielectric (polyethylene terephthalate). Parallel plate—multilayer polymer (MLP) design. Electrode: Aluminum metallization.</p> <p>Case: UL94V-0 rated premolded shell Lead-Frame Material: Tinned Cu Alloy</p> <p>Vibration: Mil Std 202 Method 204D Solder Resistance: Thru-hole wave: 260°C, 5 Sec. Δ C/C $\leq 2\%$ MMD reflow: 220°C, 30 Sec. Δ C/C $\leq 2\%$</p> <p>Lead Spacing: .400" (10.0mm) nominal CB4</p> <p>Marking: +PF type, capacitance code, tolerance code, voltage and date code</p> <p>Packaging: UL94V-0 rated reel. Units are dry-packed with desiccant in a moisture barrier bag (M/B), Moisture Sensitivity Level (MSL): 4 per IPC/JEDEC J-ST-020; level indicated on package.</p>
Rated Voltage	≤ 100 VDC					
Test Voltage	10 VDC					