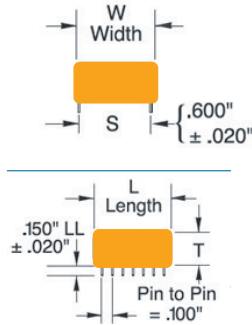


Capstick® Capacitor  
 Metallized Polymer Dielectric

# CC

Stacked Metallized polymer capacitor  
 With -55 to +150C operating temperature range



- Surface-mount Capability
- Highest ripple current x capacitance density ratings in the industry
- Novel dielectric material: Ultra-low D.F, high operating temperature, self-healing properties
- Ultra-low ESR/ESL
- Lightweight <25% of equivalent MLCC
- Excellent for resonant circuits
- High dv/dt
- Efficient size
- Rugged construction
- Made in U.S.A

## 200 VDC / 140 VAC

PF Code	Value µF	W Max	T Max	L Maz	S	Typical ESR 500khz mΩ	Max Ripple current 85C 500khz (ARMS)	SRF(MHz)	Part Number
844	0.84	0.700 (17.8)	0.320 (8.1)	0.460 (11.7)	0.6	23	6.5	1.75	844K200CC6 _ _
185	1.8	0.700 (17.8)	0.320 (8.1)	0.880 (22.4)	0.6	13	12.6	1.4	185K200CC6 _ _

## 400 VDC / 280 VAC

424	0.42	0.700 (17.8)	0.320 (8.1)	0.460 (11.7)	0.6	23	6.5	3.6	424K400CC6 _ _
894	0.89	0.700 (17.8)	0.320 (8.1)	0.880 (22.4)	0.6	22	9.6	1.75	894K400CC6 _ _

Dimensions in inches, metric (mm) in parenthesis  
 Tolerance: K (±10%) standard, J (±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 SnPb 1 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

"(optional) add "D" for SMD version, for example 844K200CC6D"

"(optional) add "-FA" for Pb-Free version, for example 844K200CC6-FA"

Note: Standard part has Sn/Pb plated terminations and does not meet latest RoHS requirements, for RoHS compliant version, add "-FA" suffix"

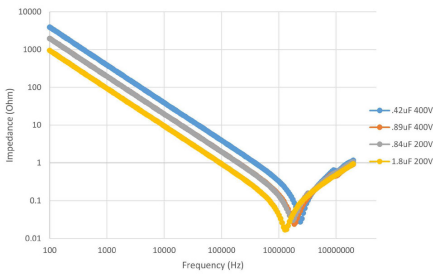
Electrical	Performance	Physical
<p><b>Capacitance Range:</b> 0.42 µF to 1.8 µF @ 1KHz</p> <p><b>Tolerance:</b> Available in ± 5%, 10% [standard], 20%</p> <p><b>Voltage Range:</b> 200, 400, VDC</p> <p><b>Dissipation Factor:</b> ≤ 0.1 % @ 25°C, 1KHz</p> <p><b>Insulation Resistance:</b> 1000F or 100GΩ, whichever is less at rated voltage and 25C</p> <p><b>Dielectric Strength:</b> 1.3 x RVDC, 2 seconds max.</p> <p><b>Self Inductance:</b> 2 to 6nh typical</p> <p><b>Temperature Range:</b> -55°C to 150°C operating -55°C to 105°C @ rated DC voltage derate voltage 1.66% / °C above 105°C max operating temperature; 150C</p>	<p><b>Accelerated DC Voltage Life Test:</b> 1,000 Hours, 85°C, 1.25 x Rated VDC Δ C/C ≤ 5% DF ≤ 1.0%, 1KHz, 25°C IR ≥ 1,000 Megohm x µF Need not exceed 1,000 Megohms</p> <p><b>Moisture Test:</b> 85°C / 85% RH / 21 days Applied Voltage: zero bias Δ C/C ≤ 7% DF ≤ 0.1%, 1KHz, 25°C IR ≥ 30% of initial limit</p> <p><b>Long Term Stability:</b> After 2 years storage, standard environment Δ C/C ≤ 2%</p>	<p><b>Vibration:</b> Mil Std 202 Method 204D</p> <p><b>Solder Resistance:</b> Thru-hole wave: 260°C, 5 Sec. Δ C/C ≤ 2% SMD reflow: 220°C, 30 Sec. Δ C/C ≤ 2%</p> <p><b>Construction:</b> Non-inductively constructed with metallized polymer dielectric. Parallel plate-multilayer polymer (MLP) design.</p> <p><b>Electrode:</b> Aluminum metallization</p> <p><b>Case:</b> UL94V-0 rated epoxy coating</p> <p><b>Lead-Frame Material:</b> Tinned Cu Alloy Lead-Frame</p> <p><b>Lead Spacing:</b> .600" (15.0mm) nominal</p> <p><b>Marking:</b> ⊕⊕ type capacitance code, tolerance code, Anti-static tube. SMD units dry packed with desiccant</p>

Capstick® Capacitor  
Metallized Polymer Dielectric

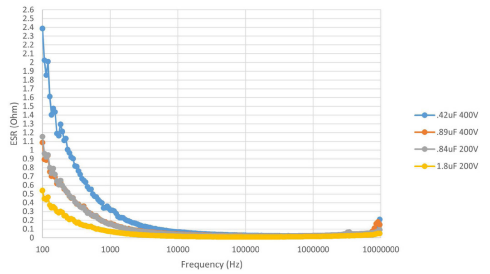
**CC**

# Electrical Characteristics

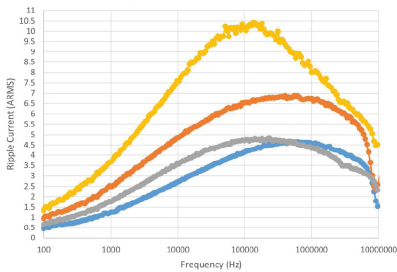
Impedance Vs Frequency



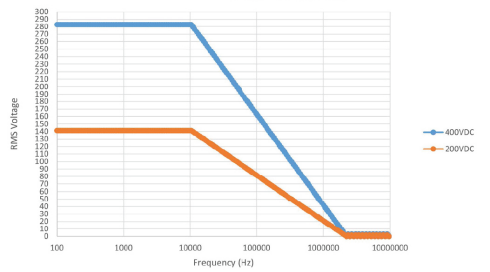
ESR Vs Frequency



Ripple Current Limit Vs Frequency -55 to +85C



Maximum RMS Voltage Vs Frequency

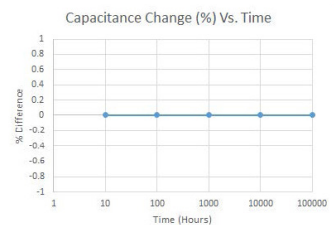
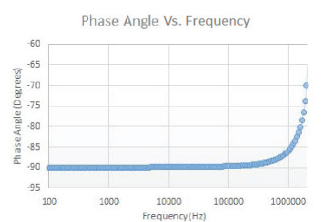
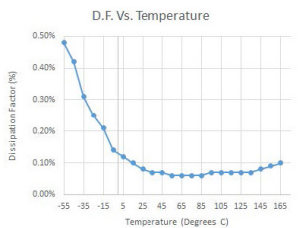
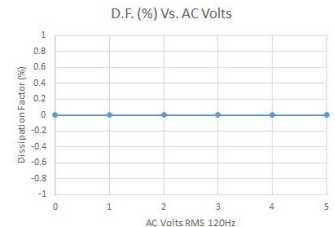
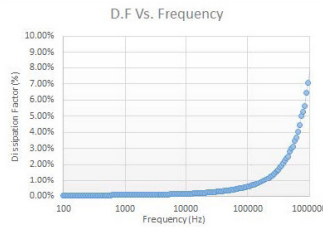
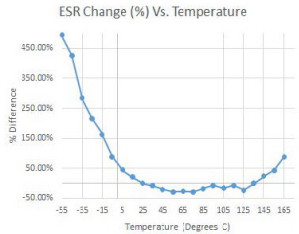
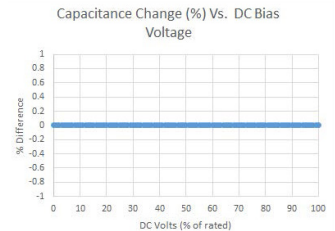
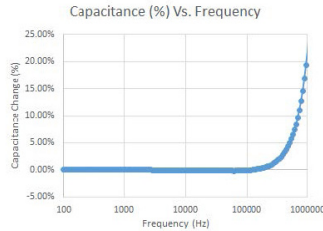
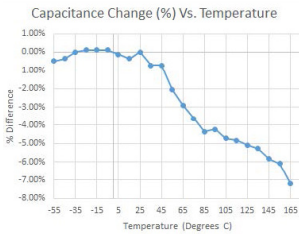


Capstick® Capacitor  
Metallized Polymer Dielectric

**CC**

# Electrical Characteristics

## 200V and 400V Ratings



**Evans** **Trusted Brands. Single Source.**  
GROUP **Hi-Rel Capacitors for Mission Critical Systems.**

Uniting four industry leaders—Evans, Paktron, UTC, and Eulex—Evans Group delivers the industry's most specialized and comprehensive capacitor portfolio.

Together, we provide power-dense, high-reliability solutions engineered for mission-critical environments across defense, aerospace, energy, and advanced RF systems.

Product specifications and technical documentation are provided for informational purposes only, are subject to change without notice, and do not create any warranty except as expressly set forth in the applicable Terms and Conditions of Sale.

**Paktron**  
1205 McConville Road Lynchburg, VA 24504

T +1 434.239.6941  
E [paktron@evans-group.com](mailto:paktron@evans-group.com)  
URL [www.evans-group.com/paktron](http://www.evans-group.com/paktron)