

Type CS (Capstick®) Metallized Polymer Network

Radial Multi-pin Metallized Polymer Network for DC to DC Converters



The Type CS multi-pin metallized polymer network is ideal for the low ESR/ESL requirements in DC to DC converters and switching power supply applications. This unique, robust, capacitor design offers high ripple current capability and high capacitance in a small package. It is available with straight pins on 0.10" centers for through-hole mounting or with gull wing leads for surface mount assembly. Type CS (Capstick®) is encapsulated in a rugged conformal coating and is packaged in anti-static tubes for easy handling.

Highlights

- ♦ Rugged conformal coated case meets UL94V-0
- ♦ Low ESR/ESL
- ♦ High ripple current
- ♦ High capacitance in a small package
- ♦ Non-inductive design
- ♦ Non-polar
- ♦ Surface mount or through hole assembly
- ♦ Multi-pin leads on 0.10" centers

Specifications

RoHS Compliant

Capacitance Range:	0.33 μF to 20.0 μF
Voltage Range:	50 Vdc, 100 Vdc, 250 Vdc, 400 Vdc, 500 Vdc
Capacitance Tolerance:	$\pm 10\%$
Operating Temperature Range for 50, 100 and 250 Vdc:	-55 °C to +125 °C (with 50% Vdc derating >85 °C)
Operating Temperature Range for 400 and 500 Vdc:	-55 °C to +125 °C with no derating
Construction:	Multilayer metallized polymer dielectric
Temperature Coefficient:	+6% from -55 °C to +85 °C
Dielectric Withstand Voltage:	1.3 x rated voltage: 50/100/250/500 Vdc 1.6 x rated voltage: 400 Vdc
Dissipation Factor (DF):	$\leq 1.0\%$ @ 1 kHz
Total Self Inductance (L):	<6 nH typical (CS6) < 4 nH typical (CS4)
Lead Material:	Tinned copper alloy frame
Insulation Resistance:	$\geq 1000 \text{ M}\Omega \cdot \mu\text{F}$ - need not exceed 1000 $\text{M}\Omega$

Part Numbering System

405	K	100	CS	4	G	-	FA
Cap				Pin	"Optional"		
(μ F)	Tolerance	Voltage	Series	Spacing	(*)		
334 = 0.33 μ F	K = $\pm 10\%$	050 = 50 Vdc	CS	4 = 0.4" (10.0 mm)	Blank = Straight Pins		Blank = 5/6 RoHS
405 = 4.0 μ F		100 = 100 Vdc		6 = 0.6" (15.0 mm)	G = Gull Wing		FA = 6/6 RoHS
206 = 20.0 μ F		400 = 400 Vdc					

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