

CLF Series

RF Power Capacitors, Ultra Stability

DESCRIPTION

Low ESR/ESL
 NP0 Porcelain Capacitors
 Excellent characteristics in current, voltage
 and power with high Q factor



APPLICATIONS

- RF Power Amplifiers
- Industrial (Plasma Chamber)
- Medical (MRI Coils)

CIRCUIT APPLICATIONS

- DC Blocking
- Matching Networks
- Tuning and Coupling

I. ELECTRICAL SPECIFICATIONS

Parameter	Value
Capacitance	1'000 to 10'000 pF
Tolerances	F, G, J, K, M above 10 pF
Working Voltage (WVDC)	see Capacitance Value chart
Temperature Coefficient	0 +/-30ppm/°C, -55°C to +125°C
Insulation Resistance	10 ⁵ MΩ min @ 25°C at rated WVDC 10 ⁴ MΩ min @ 125°C at rated WVDC
Dielectric Withstanding (test voltage applied for 5 seconds)	2.0 x WVDC for WVDC ≤ 500V 1.5 x WVDC for 500V < WVDC ≤ 2'500V
Aging	none
Piezo Effects	none

II. MECHANICAL SPECIFICATIONS

Parameter	Value	Comment
Case Size	F	7065

NB:

- all the terminations are backward compatible and lead-free.
- the non-magnetic terminations are all Magnetism-free Rated.

MR certified®

ITAR Free®

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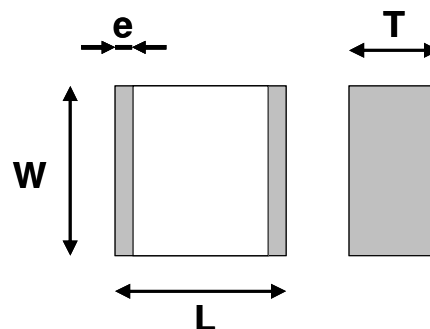
Termination Type	Code	CLF
Standard (tin-plated nickel)	S	AVAILABLE
Non-magnetic (silver-palladium)	A	AVAILABLE

III. ENVIRONMENTAL SPECIFICATIONS

Parameter	Value
Life Test	2'000 hours, +125 °C at 1.5 x WVDC (WVDC ≤ 500V) at 1.3 x WVDC (500V < WVDC < 1'250V) at 1.0 x WVDC (1'250V ≤ WVDC)
Moisture Resistance Test 1	240 hours, 85% relative humidity at +85 °C (ESA/SCC n°3009)
Moisture Resistance Test 2	56 days, 93% relative humidity at +40 °C 0V, 5V, WVDC

IV. OUTLINE DIMENSIONS

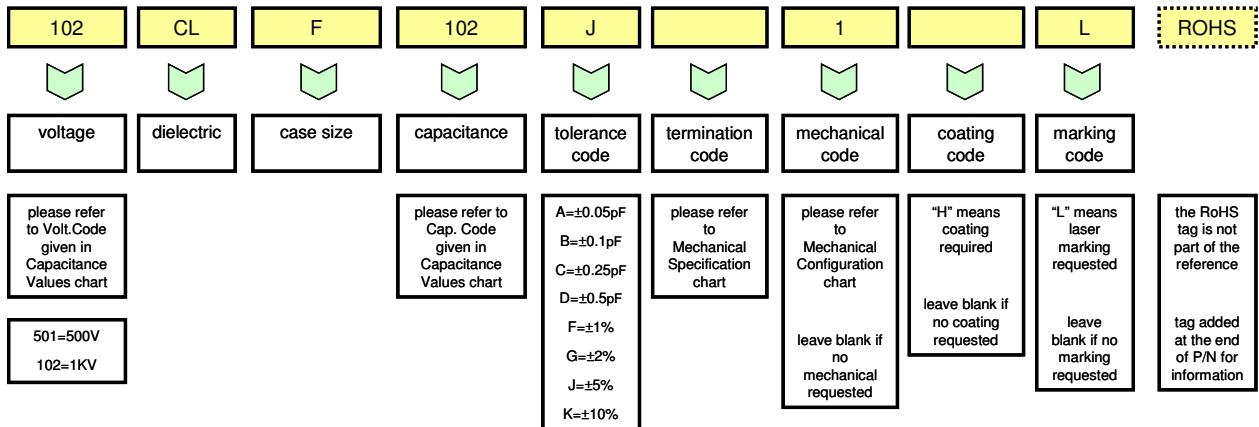
Parameter	F (7065)
Length (L)	17.80 ± 0.50 mm
Width (W)	16.00 ± 0.50 mm
Thickness (T)	4.00 mm (max.)
End-Band (e)	0.80 ± 0.60 mm



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V. HOW TO ORDER



NB:

- for capacitance values equal to or higher than 10pF, tolerances F, G, J and K apply.

VI. CAPACITANCE VALUES

Value (pF)	Cap. Code	F (7065)
1 000	102	1000V
1 100	112	
1 200	122	
1 500	152	
1 800	182	
2 200	222	
2 700	272	
3 000	302	
3 300	332	
3 900	392	
4 700	472	
5 100	512	
5 600	562	
6 800	682	
8 200	822	
10 000	103	500V

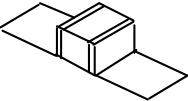
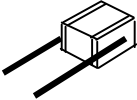
NB: special values, tolerances, higher WVDC and matching available, please consult factory.

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VII. MECHANICAL CONFIGURATIONS

VII.1. Lead/Ribbon and Wire Types

Configuration Type	Code	Description
	1	Micro-strip Ribbon
	6	Radial Wire

NB: when coding ribbons or wires for the description of the part, the termination has to be mentioned for MR_{certified} types to ensure that only non-magnetic materials are used.

Examples : 102 CLF 102 J1L any termination material could be used
 102 CLF 102 JC1L only non-magnetic termination materials could be used

VII.2. Lead/Ribbon and Wire Matrix

Termination Type	Code	CLF
Micro-strip Ribbon	1	AVAILABLE
Radial Wire	6	AVAILABLE

VII.3. Leads/Ribbons and Wires Dimensions

Within each cell, first the length and then the width/diameter of any single ribbon or wire are given.

Termination Type	Code	CLF
Micro-strip Ribbon	1	6.00 15.00
Radial Wire	6	30.00 0.90

NB: dimensions are in mm.