

Types CD17, CD18 & CDV18, High-Frequency, Mica Capacitors

High-Frequency Capacitors for CATV and RF Applications



Types CD17 and CD18 assure controlled, resonance-free performance through 1 GHz. Insertion loss data is typically flat within ± 0.1 dB over the entire frequency range, and is specified to be flat within ± 0.2 dB. Interchangeable with the most popular, common mica capacitors, Type CD17 is available in the same case sizes and lead spacing as CD15; CD18, in the same case sizes and lead spacing as CD19, and CDV18, in the same as CDV19.

Highlights

- Shockproof and delamination free
- Near zero capacitance change with (t), (V) and (f)
- Very high Q at UHF/VHF frequencies
- 0.0005 typical dissipation factor
- 100,000 V/ μ s dV/dt capability minimum
- Low, notch-free impedance to beyond 1 GHz
- Ultra low ESR for cool operation

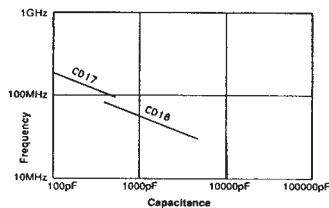
[Click here to see ordering information](#)

Specifications

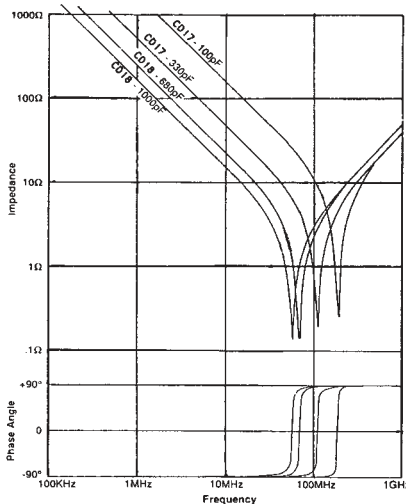
Capacitance Range	1 pF to 5,100 pF
Capacitance Tolerance	$\pm 1/2$ pF (D), ± 1 pF (C), $\pm 1/2\%$ (E), $\pm 1\%$ (F), $\pm 2\%$ (G), $\pm 5\%$ (J)
Rated Voltage	100 Vdc to 1,000 Vdc
Operating Temperature Range	-55 °C to $+150$ °C
Regulatory Information	

Typical Performance Curves

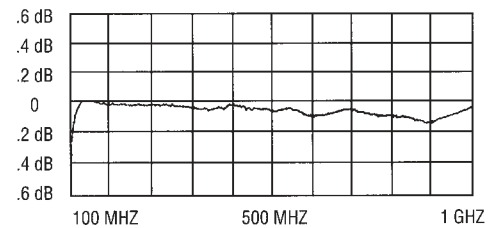
Self-Resonant Frequency vs. Capacitance



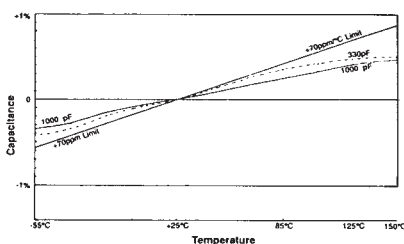
Impedance and Phase Angle vs. Frequency



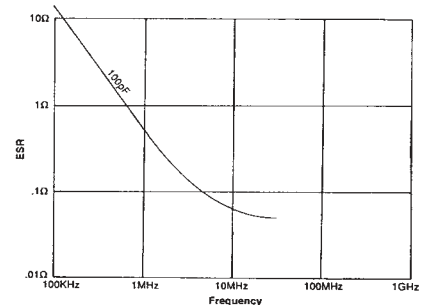
Insertion Loss vs. Frequency for CD17FC621J03, 75 Ω System



Capacitance Change vs. Temperature



ESR vs. Frequency



Types CD17, CD18 & CDV18, High-Frequency, Mica Capacitors

Notice and Disclaimer: All product drawings, descriptions, specifications, statements, information and data (collectively, the "Information") in this datasheet or other publication are subject to change. The customer is responsible for checking, confirming and verifying the extent to which the Information contained in this datasheet or other publication is applicable to an order at the time the order is placed. All Information given herein is believed to be accurate and reliable, but it is presented without any guarantee, warranty, representation or responsibility of any kind, expressed or implied. Statements of suitability for certain applications are based on the knowledge that the Cornell Dubilier company providing such statements ("Cornell Dubilier") has of operating conditions that such Cornell Dubilier company regards as typical for such applications, but are not intended to constitute any guarantee, warranty or representation regarding any such matter – and Cornell Dubilier specifically and expressly disclaims any guarantee, warranty or representation concerning the suitability for a specific customer application, use, storage, transportation, or operating environment. The Information is intended for use only by customers who have the requisite experience and capability to determine the correct products for their application. Any technical advice inferred from this Information or otherwise provided by Cornell Dubilier with reference to the use of any Cornell Dubilier products is given gratis (unless otherwise specified by Cornell Dubilier), and Cornell Dubilier assumes no obligation or liability for the advice given or results obtained. Although Cornell Dubilier strives to apply the most stringent quality and safety standards regarding the design and manufacturing of its products, in light of the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies or other appropriate protective measures) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or property damage. Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicated in such warnings, cautions and notes, or that other safety measures may not be required.