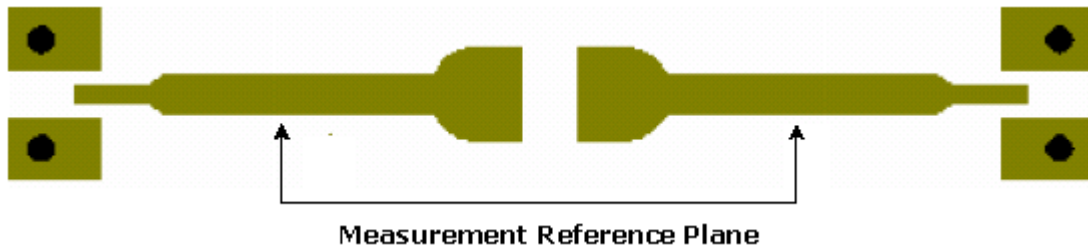


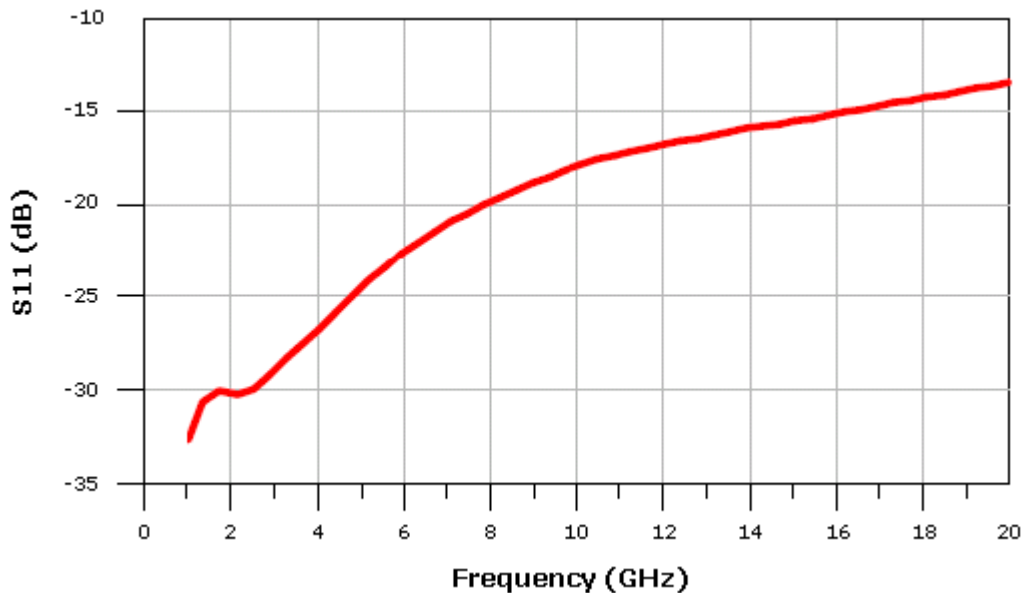
## Insertion Loss Data

Component: BB0805X7R154M16VP221  
Global Part Number: MBB0805X154MGP5N2-  
Dielectric: X7R  
Capacitance: 150nF, 220pF  
Voltage: 16VDC  
Size: 0805  
Temperature Coefficient:  $\pm 15\%$  (-55C, +125C)

Measured on 8 Mil. Rogers 4003 (50MHz-20GHz)  
Line Width 17 Mils  
Pad Width 38 Mils  
Gap Width 22 Mils



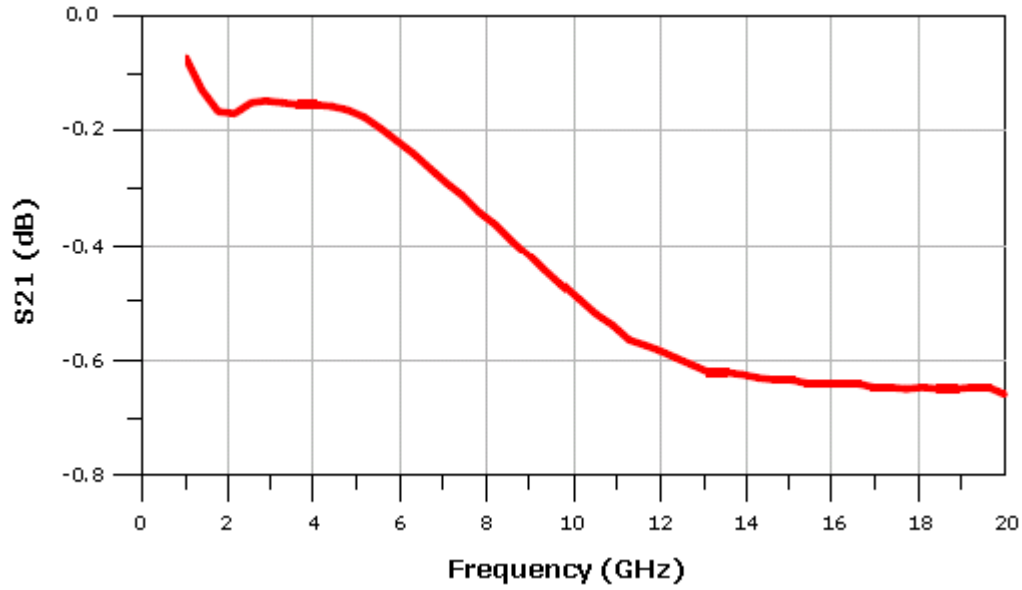
The capacitors were mounted to pad stacks printed on 8-mil Rogers 4003 material ( $\epsilon_r=3.38$ ). Series 2-port S-parameter measurements were made using a vector network analyzer that was calibrated to the outer edge of the pad stacks. Test fixture artifacts were removed from the initial S-parameter data by de-embedding the pad stack effects, and subsequently extracting stray capacitance to ground using a pi-network equivalent circuit. The presented data is thus nominally test-fixture independent. Presented below is both the de-embedded data and the de-embedded and extracted data.



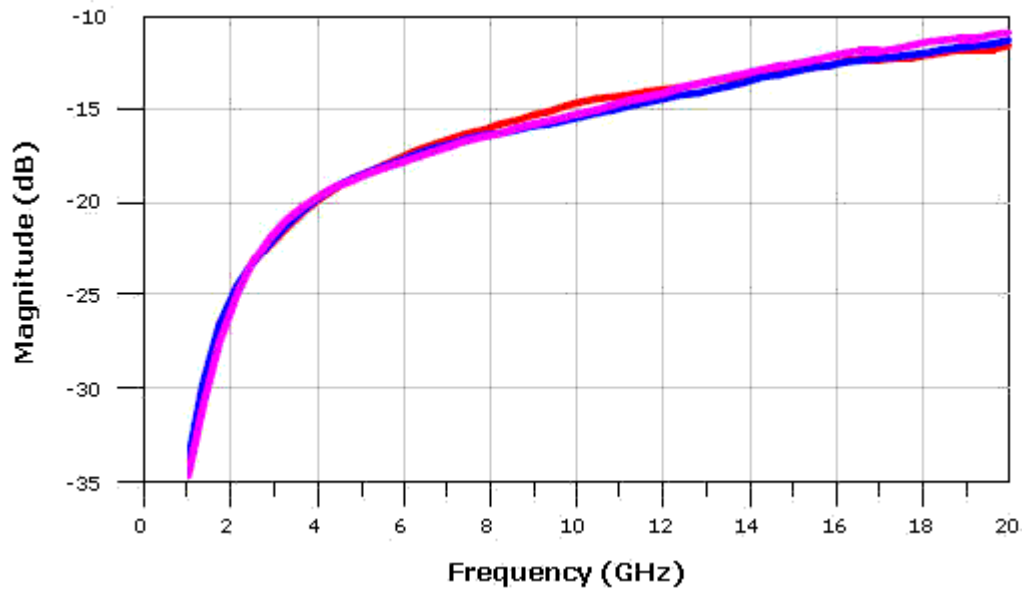
**Figure 1** - Average Magnitude De-embedded and extracted S11 (dB) of Capacitor: BB0805X7R154M16VP221 Lot: 011240-79A measured on 8mil Rogers 4003.



## Insertion Loss Data

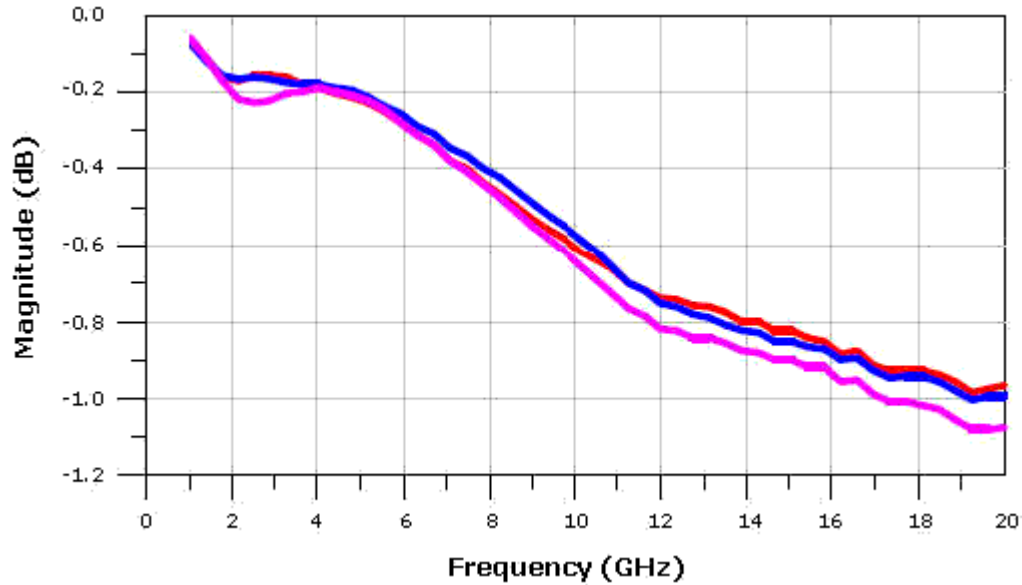


**Figure 2** - Average Magnitude De-embedded and extracted S21 (dB) of Capacitor: BB0805X7R154M16VP221 Lot: 011240-79A measured on 8mil Rogers 4003.



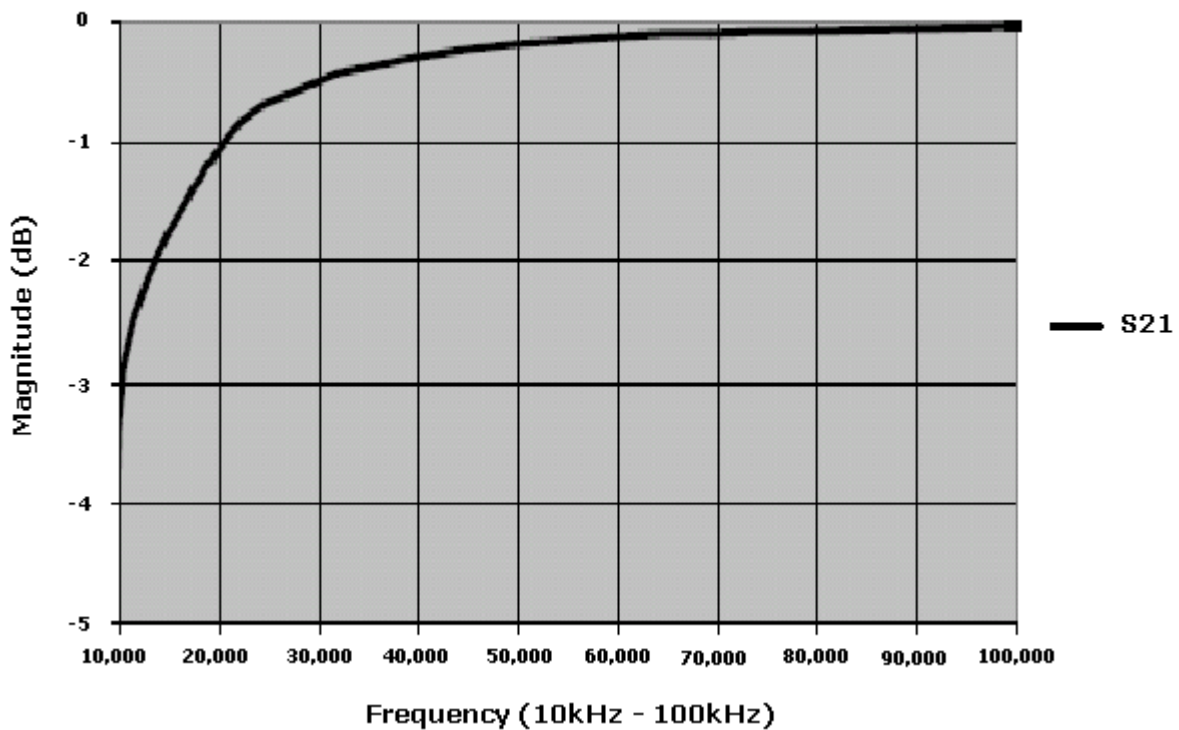
**Figure 3** - Magnitude De-embedded S11 (dB) of Capacitor: BB0805X7R154M16VP221 Lot: 011240-79A measured on 8mil Rogers 4003.

## Insertion Loss Data

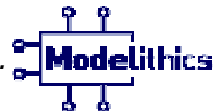


**Figure 4** - Magnitude De-embedded S21 (dB) of Capacitor: BB0805X7R154M16VP221 Lot: 011240-79A measured on 8mil Rogers 4003.

## Capacitor S Parameter 150nF (modeled)



Test Measurements and Modeling Services Provided by [Modelithics](#).



 PRESIDIO COMPONENTS, INC.

7169 Construction Court, San Diego, CA 92121 USA • Tel: 858-578-9390 • Fax: 800-538-3880 or 858-578-6225  
Web: [www.presidiocomponents.com](http://www.presidiocomponents.com) • Email: [info@presidiocomponents.com](mailto:info@presidiocomponents.com)