

# N4000-6 (FC) BC<sup>®</sup>

Buried Capacitance, High-T<sub>g</sub> Multifunctional Epoxy Laminate &  
Buried Capacitance, Fast Cure, High-T<sub>g</sub> Multifunctional Epoxy Laminate



N4000-6 (FC) is a high-T<sub>g</sub> FR-4 epoxy that provides a wide range of performance versatility and ease of processing. Offering a greater degree of freedom of design for smaller, more reliable assemblies, N4000-6 (FC) BC<sup>®</sup> is offered as a buried capacitance solution. N4000-6 (FC) BC<sup>®</sup> is engineered for use as a BC-2000™ substrate and utilizes the same proven high-T<sub>g</sub> multifunctional resin system as N4000-6 (FC), which is ideal for a number of demanding applications including high-layer count backplanes and high-density interconnects.

what you need...  
when you need it...  
where you need it...

**PARK**  **nelco**

# N4000-6 (FC) BC<sup>®</sup>

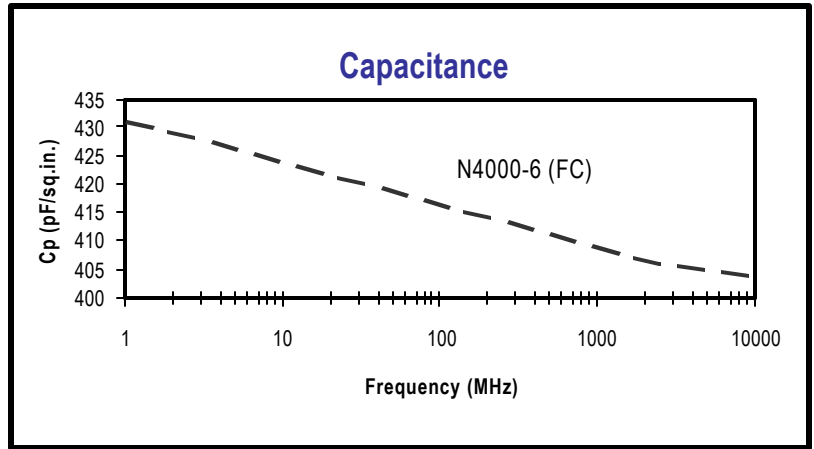
Buried Capacitance, High-Tg  
Multifunctional Epoxy Laminate &

Buried Capacitance, Fast Cure, High-Tg  
Multifunctional Epoxy Laminate &

The N4000-6 (FC) series has robust thermal properties to withstand extreme operating temperatures and multiple thermal excursions or PCB rework operations. This product's performance through hot-air solder leveling, IR solder fusion, wave soldering, vapor phase soldering, and thermal shock testing is outstanding.

N4000-6 BC<sup>®</sup> and N4000-6 FC BC<sup>®</sup> are 2mil (50µm) dielectric BC-2000<sup>™</sup> buried capacitance substrate s. As you would expect from a high-Tg material, N4000-6 (FC) BC<sup>®</sup> is targeted for use in fine-line multilayers, surface-mount multilayers, and large-format backplanes. These materials are effective for BGA, MCM-L, and CSP component attachment N4000-6 (FC) BC<sup>®</sup> is an ideal solution for distributed capacitance functions for telecommunications, wireless handsets, and other high frequency applications. N4000-6 (FC) BC<sup>®</sup> is provided with either Flip Double-Treat or RTFoil<sup>®</sup> to provide the most consistent electrostatic capacitance.

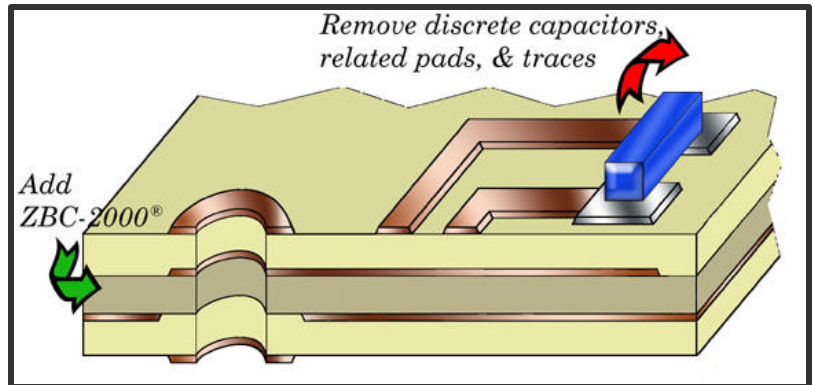
As with all Park / Nelco materials, the N4000-6 (FC) and N4000-6 (FC) BC<sup>®</sup> are vacuum laminated. N4000-6 (FC) is available in a wide variety of constructions, copper weights and glass styles, and is ideally suited for constructions featuring N4000-6 (FC) BC<sup>®</sup> buried capacitance layers. It is also available in standard copper, double-treat copper and our RTFoil<sup>®</sup> Laminate.



Key Engineering Values		
	N4000-6 BC <sup>®</sup>	N400-6 FC BC <sup>®</sup>
X / Y CTE (ppm / °C) [ 40 to 125°C]	12 - 16	12 - 16
Z-Axis Expansion (%) [50 to 260°C]	3.9	4.1
Tg by DSC (°C)	175	175
Dielectric Constant (.002" 106)		
@ 1KHz	4.2	4.2
@ 1 MHz	3.8	3.8
@ 2.5 GHz	3.6	3.6

Park / Nelco reserves the right to make changes without further notice to any products herein to improve reliability, function or design. Park / Nelco does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights nor the rights of others. This disclaimer of warranty is in lieu of all warranties whether expressed, implied or statutory, including implied warranties of merchantability or fitness for a particular purpose. Park / Nelco is an Equal Opportunity Employer.

Nelco<sup>®</sup>, Neltec<sup>®</sup>, RTFoil<sup>®</sup>, SI<sup>™</sup>, LD<sup>™</sup> and EF<sup>™</sup> are trademarks of Park Electrochemical Corporation.  
BC-2000<sup>™</sup> and Buried Capacitance<sup>™</sup> are trademarks of the Sanmina Corporation.



For more information contact one of our ISO 9002 facilities worldwide or visit us at [www.parknelco.com](http://www.parknelco.com)

Nelco, California (714) 879-4293  
 Nelco, New York (845) 567-6200  
 Neltec, Tempe, AZ (480) 967-5600  
 Nelco Products, Singapore (65) 861-7117  
 Nelco Wuxi, China (86) 510-528-1100

Nelco / Dielektra, UK (44) 1695-722691  
 Nelco / Dielektra, France (33) 380-10-10-00  
 Neltec SA, Lannemezan, France (33) 562-98-52-90  
 Nelco / Dielektra, Germany (49) 2203-480  
 Email: [info@parknelco.com](mailto:info@parknelco.com)