

IPC-4101A vs. IPC4101

Park/Nelco is providing the following table to outline the pertinent specific changes that were made in the transition to IPC-4101A. These changes have been incorporated into our systems and will be reflected in Park/Nelco product documentation.

DESCRIPTION	IPC-4101A	IPC-4101
1 IPC-650 test methods		
1a Permittivity and Loss Tangent, Parallel Plate, 1MHz to 1.5GHz	Added	N/A
2 New Paragraphs		
2a Defines Multifunctional Epoxy	Para 3.1.13	N/A
2b Defines Difunctional Epoxy	Para 3.1.14	N/A
3b Defines AAUBS	Para 3.1.15	N/A
4b Defines Filler	Para 3.1.16	N/A
3 Table 1-1 Metal Cladding Types.		
3a Added type "V"	Reverse treated, HTE, foil for buried capacitance applications	N/A
3b Added type "Z"	Double-treat, HTE, foil for buried capacitance applications.	N/A
4 Table 1-2. Copper foil weight and thickness		
4a Defines weight and thickness requirements	Added English dimensions. Some of the values changed.	
5 Surface Quality Classification		
5a Class A	29 points max.	29 points max.
5b Class B	17 points max.	5 points max. & no indentations >0.015".
5c Class C	5 points max. & no indentations >0.015".	17 points max.
5d Class D	0 points. Longest indentation <0.00492"	0 points. Longest indentation <0.00492"
5e Class X	AABUS	AABUS
6 Surface and subsurface imperfections		
6a Para. 3.8.3.1.6 defines the requirements for surface and subsurface requirements	Added "Encapsulated metal particles of any size are not allowed."	

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7 Table 3-6. Permissible variation in Length and Width of Prepregs			
7a	Requirements for rolls	Width. +0.252"/-0.000". Length. ±1% of specified value	No requirement for rolls.
8 Dimensional Stability (tolerance from nominal)			
8a	Range A	± 0.0003"/"	± 0.0003"/"
8b	Range B	± 0.0002"/"	± 0.0005"/"
8c	Range C	± 0.0001"/"	± 0.00075"/"
8d	Range X	Unspecified	Unspecified
9 Prepreg Shelf Life			
9a	Condition 1	Six months when stored at <5°C [41°F]	Six months when stored at <4.5°C
9b	Condition 2	Three months when stored at <20°C [68°F] and <50 % RH	Three months when stored at 21 ± 2°C, RH 30 - 50%
10 Certificate of Conformance			
10a	Para 4.4.5 defines the minimum requirements for certificate of conformance content	This is a new paragraph.	N/A
11 Other changes			
11a	Product Specification Sheets expanded for accuracy		
11b	FR-4 expanded from 6 to 9 grades.		
11c	Added halogen free grades.		