



**Minutes of P-2.2 Subcommittee Meeting
Paper, Film, Mica & Wet-Electrolytic Capacitors**

Spring 2010 meeting, Wednesday, April 28, 2010,
Hyatt Regency Grand Cypress, 1 Grand Cypress Blvd, Orlando, FL 32836, (407) 239-1234

1.0 Call to Order - Circulate Membership Roster

Meeting called to order at 8:14 a.m. by Chairman Laird Macomber

2.0 Committee Organization and Procedures

2.1 Membership Intros were conducted and Roster circulated.

The attendance was as follows:

NAME	COMPANY
Chris Reynolds (by phone)	AVX
Laird Macomber	Cornell Dubilier
Ed Mikoski	ECA
Michael Lauri	IBM
Mary Carter Berrios	KEMET
Jayson Young	KEMET
Carl Lindquist	Guest Consultant

A quorum was present.

Member Organizations Present	Present at Spring 2010 Meeting	Present at Fall 2009 Meeting	Present at Spring 2009 Meeting
AVX	Y	N	N
Cornell Dubilier	Y	Y	Y
IBM	Y	Y	Y
KEMET	Y	Y	Y
SOC America Inc.	N	Y	Y
Vishay	N	Y	N

Member Organizations Absent	Other Organizations Present
SOC America Inc	ECA
Vishay	

2.2 Approval of Agenda: Approved

2.3 Approval of October 7, 2009, P-2.2 Subcommittee Meeting Minutes: Approved unanimously.

2.4 Correspondence: No correspondence had been received.

2.5 Review of Committees Scope: Paper, film, mica and wet electrolytic capacitors for all applications except inductive heating and utility power-factor correction. No changes were made to the scope.

3.0 Reports: No reports received.

4.0 Old business

4.1 Status of SMT film cap specification PN5182: Mary Carter Berrios did work on this spec with the help of Bernie Aronson. Mary offered to email the IEC specs to Chairman Laird for this document. The subcommittee is continuing to work through this document and fix what was missing. Laird will add the IEC test information into the document and then set up a conference call to review it.

4.2 Status of a new standard on medium power film capacitors PN5206: No work was done on this document since the past meeting. Chairman will call a teleconference to move this document forward.

4.3 Five year review of documents: In Ed Mikoski's April 19th *ECA Summit Standards Summary Report* there are 17 documents assigned to P-2.2 as follows:

EIA-580A0AB	DT SP Fixed Polyethylene Terephthalate Film Dielectric Capacitor	
EIA-580A000	Sect Spec for Fixed Cap Metal Electrode/Polyet-terep	
EIA-580B000	Sec Spec Fixed Metallized Electrode Film Dielectric AC Capacitors	
EIA-580AA00	Blk Det Spec for Fixed Metal Polyeth-tereph Chip Cap Encapsulated	
EIA-580A0AB	Detail Spec Fixed Polyethylene Terephthalate Film Dielectric Capa	
EIA-580B000	Sect Spec for Fixed Metallized Electrode Film Dielectric AC Capac	
EIA-580A0AC	DT SP Fix Metallized Polyethylene Terephthalate Film Dielec Axial	
EIA-580BA00	Blk Det Spec-fixed Metallized Electrode Film Dielectric AC Capac	
EIA-580A0AB	Detail Spec for Fixed Polyethylene Terephthalate Film Dielectric Capa	
EIA-495-A	Reaff EIA-495-A, Film Dielectric Cap Metallized Paper Electrodes	1997
EIA-479-A	Film-Paper, Film Dielectric Capacitor for Microwave Ovens	1993
EIA-463-B	Fixed Al Electrolytic Capacitors for Alt current Hvy and Std Duty	2003
EIA-454	Fixed Paper and Film Paper, Etc.	1990
EIA-401	Paper, Film Dielec Cap Pwr Semicond	1990
EIA-376	Fix Film Dielec Cap Metal/N-metal DC	1990
EIA-376-1	Addendum 1 Parts List Suppl to 376	1990
EIA-(PN5182)	Fixed Film Diel Cap, Stacked Metallized Chip Capacitors	

Chairman Laird agreed to request copies from Cecelia Yates for review. After the meeting Cecelia asked that Laird check first if he already had copies of any of these specifications, and she would furnish the ones he did not have. Ed said that in ANSI terminology, to archive a standard means to stabilize a standard. Stabilized standards do not have 5-year reviews.

5.0 New Business

5.1 Capacitor outline drawings for PDP-100: Chairman Laird said that *EIA-ECA-PDP-100 Registered Mechanical Outlines for Passive Electronic Components*, which is administered by the P-4 Mechanical Outlines Committee, does not yet have any capacitor outlines, and he wants to include some P-2.2 capacitors. While Mike Lauri wanted to delay consideration of outline drawings until after PN-5182 was complete, the subcommittee agreed to go ahead with popular chip film capacitor case sizes. Carl Lindquist offered to provide support on the initial CAD drawing work. Mary Carter

Berrios and Laird will select popular sizes and give the dimensional data to Carl. PDP-100 drawings are created using DesignCAD, AutoCAD or Visio software and installed on the ECA website in PDF format.

5.2 Solicit TDK-EPC as a new member of P-2.2: TDK-EPC Corporation is an October 1, 2009 merger of TDK's passive electronic components business and EPCOS. The TDK-EPC product portfolio includes ceramic, aluminum electrolytic and film capacitors, ferrites and inductors, high-frequency components such as surface acoustic wave (SAW) filter products and modules, piezoelectric and protection components, and sensors. While its portfolio has products of multiple ECA engineering committees, it is a major producer of capacitors assigned to P-2.2. P-2.2 wants TDK-EPC as a member, and Laird will contact Mike Cannon as a first step; let Mike know that P-2.2 is doing a new medium-power film capacitor standard and see if EPCOS would participate.

6.0 Next Meeting – Fall 2010 meeting will be in late September in Austin, TX, at a site to be selected by ECA.

7.0 Adjournment – meeting was adjourned at 10:02 a.m.

8.0 Action Items

1. Mary Carter Berrios is to email IEC 19 and 20 standards to Chairman Laird.
2. Chairman Laird is to put IEC information into PN5182 and set up teleconference to discuss the changes prior to ballot vote.
3. Chairman Laird is to set up teleconference to discuss PN5206 specification.
4. Mary and Laird are to provide dimensional data for popular chip film capacitors to Carl Lindquist for addition to the PDP-100.
5. Chairman Laird is to request copies of documents from ECA for 5 year review.
6. Chairman Laird is to contact Mike Cannon to get TDK-EPC as a new member of P-2.2.



Laird L Macomber
Chairman

Michael Lauri
Acting Secretary