

Minutes of P-2.1 Committee on Ceramic Dielectric Capacitors

Wednesday, October 6, 2004

Holiday Inn on the Bay

San Diego, CA

Scope of the P-2.1 Committee on Ceramic Dielectric Capacitors (approved 10/13/99):

All types of Ceramic Dielectric Capacitors.

Attendees:

<u>NAME</u>	<u>COMPANY</u>
Travis Ashburn	Kemet
Susan Barkal	Kemet
Michael Cannon	TDK Corporation
Terry Charles	Panasonic
Michael Griffith	KOA Speer
Frank Hayward	American Technical Ceramics
Nicholas Holmberg	INTEL
Mike Lauri	IBM
Ming Li	AEM, Inc.
Carl Linquist	SAN-O Industrial Corp.
Laird Macomber	Cornell Dubilier
Karun Malhotra	Murata Electronics, NA
Len Metzger	Panasonic
Maria Petkova	Presidio Components
Chris Reynolds	AVX
Dave Ritchey	Yageo

Chairman Michael Cannon called the meeting to order at 12:05pm.

1.0 Committee Organization and Procedures

1.1 Membership and attendance

Self-introduction was made and attendance taken. We have a quorum.

1.2 Approval of the Agenda

Mike Cannon added 2.9 PDP-100 mechanical outlines to agenda. The committee unanimously accepted the agenda with additional of item 2.9.

1.3 Approval of the Minutes

The committee unanimously accepted the minutes with the noted corrections. Mike Cannon added a note that this committee will review on the Mechanical outlines.

1.4 Correspondence & Review of Committee's Scope

Mike Cannon requested Cecilia to provide updates on our scope to eliminate some dielectrics.

1.5 Report of task groups, committees, and DSCC efforts

We received correspondence from Jim Canner(7/27/04) concerning his last week working for Murata. He will be available for contact after July 30 at

jpcanner@adelphia.net. "It is has been a pleasure working with all of you and I hope that our paths will cross again soon."

1. DSCC

There were no correspondences. Ed Mikoski will contact DSCC to make sure they attend next meeting.

2. Automatic Component Handling Committee, ACH- Dave Ritchey/Yageo

Per Dave Ritchey, the ACH committee is updating some older standards. There is some major work on an Application Guide from the ACH committee. A sub-group is working to obtain new members. ACH is revising a camber procedure and how it is done. There is an update on ACH2000 for the new matrix tray standard from EIA.

3. S1 Committee

One important point during the S1 meeting was to commend the P2.1 committee on its efforts in putting together an engineering bulletin that address the facts about tin whiskers.

The fall 2005 engineering meeting will be in Memphis (backup city is San Antonio) and the Spring 2006 meeting held at a location (undefined) in Florida.

4. STC Committee

The P2.1 committee should attend the STC committee meeting. Laird Macomber indicated that there are no consistences between what the semiconductor vendors and the passive components claim with regards to whisker growth. TI use platinum/gold therefore they do not see some of the same issues.

2.0 Old Business

2.1 Status of balloting latest revision of EIA-595-A (SP-4622)

From our meeting minutes from Tampa, this document should have already been out ballot. Mike Cannon will look into this matter with ECA to determine what occurred.

2.2 Status of EIA-469-D (PN-4621) SP ballot.

Mike Cannon will determine the status of this ballot.

2.3 Status of EIA-198-F "Ceramic Dielectric Capacitors Classes I, II, III, and IV"

Mike Cannon will contact Jim Canner to determine the status of this document. Karun Malhotra will discuss with Murata Japan and inform Mike Cannon on his findings.

2.3.1 Part II: Test Methods

2.3.2 Part III: Individual Specifications

The chairman suggested we add smaller size case sizes “01005 and voltages less than 16V.

2.3.2.1 Status of SMD high voltage

Karun Malhotra has some information to discuss and will arrange a conference call between Murata, TDK, Wright Capacitors and Kemet.

2.3.2.2 Status of leaded high voltage

2.3.2.3 Status of Reverse Geometry Low Inductance

The committee chairman asked if there were others interested in participating on this committee to provide their contact information.

2.4 Status of IEC/EIA 521

Mike Cannon introduced the new member (Travis Ashburn) who replaced Dick Reynolds/Kemet who is now in charge of this document. Travis will provide this committee with an update at our next meeting. The committee consists of the following members: Panasonic, TDK, IBM, Murata, INTEL, and AVX. A conference call will be arranged to discuss this document.

2.5 Status of ESL Capacitor test method

Update on the high frequency from JEITA. Karun Malhotra indicates that Murata Japan is not concerned about this issue. The committee decided to monitor what will be the final resolution from JEITA. Nick Holmberg volunteered to draft a new document for PN 4563.

2.5.1 Update on JEITA activities

Terry Charles will get an update from Sanyo or Panasonic for the next meeting.

2.6 Report from Ceramic Capacitor Working Group (meeting 10/04/04, 9am-5pm)

We worked from 9am-5pm, but due to other meetings, we yielded some of our allotted time to other committee's time slot. Mike Cannon will discuss time slot at the chairman meeting later today.

2.6.1 Low voltage component bulletin

2.6.2 IEC comparison to EIA's historical approach

2.7 Status on Electro-static Discharge(ESD teleconference).

In the past, a teleconference was planned, however, there were several scheduling conflicts, and therefore the chairman is requesting if this issue should still be a

focus for this committee. Per Karun Malhotra, there are still some concerns with coating (conformal) versus non coated part in the industry. There are no general guidelines for ESD. Karun Malhotra suggested/proposed that we draft a white paper for next meeting. Mike Cannon stated that there are lots of papers from CARTS that we should utilize to compile this white paper. Karun Malhotra, Travis Ashburn and Mike Cannon will review and have something within one week.

2.8 Active projects document file tracking method

The chairman will follow up with ECA on the latest active project sheet.

2.9 PDP-100 Mechanical Outlines

Mike Cannon scanned a number of outlined drawings from PDP-100 and sent them to committee members that were review. Mike Cannon and Terry Charles will review the drawings to see if any else is needed.

3.0 New Business

3.1 ECA Engineering Bulletin posting of tin whisker position statement

Mike Cannon presented a slide of the members who participated and commented on the Engineering bulletin concerning whiskers. It was decided to add the members' names to this document. Karun Malhotra would like to poll the committee members to come up with some acronym we can use as a name for this document.

3.2 Working Group status report and proposed agenda items for next meeting.

3.3 Correct sub-committee name on all correspondence.

4.0 Next meeting

The next meeting will be held the week of 16-19 May 2005 at the Chateau Sonesta in New Orleans, LA.

5.0 Adjournment

The meeting was adjourned at approximately at 1:27pm.

This meeting was conducted in accordance with the EIA Legal Guidelines and the Manual of Organization and Procedures.

Michael C. Cannon

Michael Cannon
Chairman

Terry D. Charles
Acting Secretary