



Electronic Components, Assemblies & Materials Association

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Minutes of P-2.5 Committee on Tantalum Capacitors

Wednesday, 27 September 2006 Silver Legacy Hotel Reno, NV

Scope of the P-2.5 Committee–
All Tantalum and Niobium Dielectric Capacitors

Attendees:

<u>NAME</u>	<u>COMPANY</u>
Teri Arguelles	Jabil
Mary Carter Berrios	KEMET
Michael Griffith	KOA
Mike Lauri	IBM
Mihee Lee	Samsung Electro-Mechanics
Carl Lindquist	San-O-Industrial Corp
Laird Macomber	Cornell Dubilier
Ed Mikoski	EIA/ECA
Chris Reynolds	AVX
David Richardson	Vishay
Dave Toomey	Vishay
Jason Young	KEMET

<u>Member Organizations Present</u>	<u>Present Reno</u>	<u>Present Ft Lauderdale</u>	<u>Present at Memphis</u>
AVX	Y	Y	Y
Cornell Dubilier	Y	Y	Y
IBM	Y	Y	Y
KEMET	Y	Y	Y
KOA	Y	Y	Y
Samsung Electro-Mechanics	Y	^Y	n/a
Vishay	Y	Y	Y

^Indicates activated as member of committee

<u>Member Organizations</u> <u>Absent</u>	<u>Present</u> <u>Reno</u>	<u>Present Ft</u> <u>Lauderdale</u>	<u>Present at</u> <u>Memphis</u>
Intel Corporation	N	N	Y
Murata*	N	N	N
Panasonic	N	N	Y
Taiyo Yuden*	N	N	N

* Indicates not used in determination of quorum due to record of non-attendance

<u>Other Organizations Present</u>
EIA/ECA
Jabil
San-O-Industrial Corp

1 Committee Organization and Procedures

1.1 Membership and Attendance

Meeting was convened by Chairman Dave Richardson. Role was taken. A quorum was present.

1.2 Review and Approve Agenda

Agenda was approved.

1.3 Approve minutes of last Meeting, Ft Lauderdale, Spring 2006

Minutes from last meeting were approved with no amendments.

1.4 Correspondence

None received

2. Old Business

2.1 Reports:

2.1.1 Passive Component Steering Committee (S.1)

Next meeting (Spring 2007) is in San Diego Ca. Apr 16-19.

2.1.2 Government Specifications and Standards

Ed Mikoski will provide path for reviewing G11 meeting minutes. Jayson to call group together to discuss with DSCC any new requirements.

2.2 Status

2.2.1 Status: Standard (EIA-535BAAC) Low ESR (EIA-535BAAE)

535-BAAC is being updated to include new case sizes, series, polymer, FD, Niobium, and any other new developments since the last revision. Dave Richardson and Dave Toomey to finalize draft.

2.2.2 Leadframeless/facedown termination molded specification?

PN's have been assigned but no work has started.

2.3 Hazardous Material IPC 1752 Spec

Mary provided an update on this listing during the S-1 committee session on Sept 26th. Adobe 1.1 version will be coming out that will fix the "June Bug". Current spec places all components in a single file.

2.4 Lead free solder topics - Tin Whiskers

Completed. CB-23 "Environmental Acceptance Requirements for Whisker Susceptibility of Pb-Free Alloy Surface Finishes" was approved in the S-1 committee meeting on Sept 26th.

2.5 Tantalum Polymer Spec - Status

EIA 953 has been issues. Complete.

2.6 Review existing specifications: J-Std 020C, IPC 9503(MSL Passives), IPC 9504 (Assembly Process Simulation for Non-IC Devices)

A joint standard between IPC/ECA/JEDEC is underway. Members from each ECA P committee will be selected to assist. Mary Carter-Barrios, David Richardson, Chris Reynolds, Teresita Arguelles, and Gonzalo Herrera will assist through P2.5.

2.7 Review and update EIA list of Active working projects.

Dave Richardson to send Ed Mikoski email for update of all open PNs. Need to get a complete list.

2.8 Review Niobium/NbO draft specification/PN number 5075

AVX to continue with PN. No one else is working on NbO at this time.

2.9 EIA 717 Qualification Specification

Final changes were reviewed in the P2.5 workshop on Sept 25th. Dave Richardson to set up a discussion page in the ECA Technology Message Board. Jayson to update the document and post on the EIA bulletin board once revised.

3.0 New Business

3.1 Address AEC Q200 Rev C Preconditioning Concerns

AVX/Kemet/Vishay have completed a study of parts with and without the Q200 preconditioning requirement (85/85 aging for 168 hr) during 85 C Humidity Testing, Life Testing, and Moisture Testing. The testing is being summarized for discussion with the Q200 group.

3.2 Update 809 Application Guideline. Include polymer, high temp product, Face down terminations and mini-chip technologies.

The spec was reviewed in the P2.5 workshop on Sept 25th. The sections were divided among the team members with each team member assigned a section to update.

Vishay to update section 2. KOA to update section 3. AVX to update section 4. Kemet to update section 5. Committee has asked Jabil Circuit for suggestions on what is needed. MSL rating and polarity orientation in packaging were noted by Jabil as good topics to include.

3.3 Status of Component Bulletin for Tin Whiskers as it relates to Tantalum.

Complete.

3.4 Inputs for "All-Chairs Meeting"

No inputs.

4.0 Adjournment

Meeting was adjourned at approximately 4:00 pm. The next meeting will be held in San Diego, CA in conjunction with the April 16-19, 2007 ECA Spring Engineering Summit.

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

David Richardson
Chairman

Jayson Young
Secretary