



**Minutes of P-2.5 Committee on Tantalum Capacitors**

**Wednesday, 21 April, 2004      Hilton Tampa Westshore      Tampa, FL**

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

Attendees:

<b><u>NAME</u></b>	<b><u>COMPANY</u></b>
Susan Barkal	Kemet
Michael Griffith	KOA
Nick Holmberg	Intel Corporation
Carl Lindquist	San-O-Industrial Corp
Laird Macomber	Cornell Dubilier
Brian Piscitelli	KOA Speer Electronics
Chris Reynolds	AVX
David Richardson	Vishay
Dave Toomey	Vishay

<b><u>Member Organizations Present</u></b>	<b><u>Present at this meeting</u></b>	<b><u>Present at previous meeting?</u></b>
AVX	Y	Y
Cornell Dubilier	Y	N
Intel Corporation	Y^	N
Kemet	Y	Y
KOA	Y	Y
Vishay	Y	Y

^Indicates activated as member of committee

<b><u>Member Organizations Absent</u></b>	<b><u>Present at This Meeting?</u></b>	<b><u>Present at previous meeting?</u></b>
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IBM	N	Y
KRFM	N	Y
Murata	N	Y
Panasonic	N	Y
Taiyo Yuden	N	Y

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

<b>Other Organizations Present</b>
DSCC
EIA/ECA
San-O-Industrial Corp

## 1. Meeting convened by chairman Dave Richardson at approximately 2:00pm

- 1.1 A quorum was present
- 1.2 The agenda was approved
- 1.3 The minutes of last meeting, San Antonio, Tx Fall 2003 were approved
- 1.4 There was not correspondence

## 2. OLD BUSINESS

### 2.1 Reports

2.1.1 Passive Component User's Group (U.1)...Dave Richardson  
Next meeting October in San Diego

2.1.2 Government Specifications and Standards... DSCC Representative  
Status of Mil-PRF-55365 Changes - No DSCC rep at meeting

### 2.2 Surface Mount Tantalum Capacitors

2.2.1 Status: Standard (EIA-535BAAC), Low ESR (EIA-535BAAE). Discussed merging these two standards into one and updating the ratings table.

2.2.2 Discussion of new case sizes, ratings, or products...No new case sizes or voltages at this time.

2.2.2.1 Lead-frame less molded specification? Further discussion at next meeting

2.3 Hazardous and recyclable material considerations for tantalum chips. Committee supports ECA Materials Declaration Guide in lieu of individual documents.

2.4 Lead free solder topics - Tin Whiskers.....Ceramic P2.1 issuing a Comp. Bulletin.

P2.5 committee will review and intends to support tin this bulletin.

2.5 Review updates to Tantalum - Polymer draft specification - PN 4094 for Polymer. Comments will be sent to Susan Barkal at Kemet and will be reviewed at next P2.5 working group meeting.

2.6 Discussion of moisture sensitivity tests for SMD solid and polymer tantalum

2.6.1 Review existing specifications: J-Std-020B, IPC-5903 (MSL passives), IPC-5904 (Assembly Process Simulation for Non-IC Devices). Need to compare these specs for discussion at next meetings.

2.7 Review and update EIA list of "active working projects". Projects were reviewed.

2.8 Review Niobium/NbO draft specification. Voted to open a PN. PN number is 5075. Spec to be updated and reviewed at next meeting and then sent out for Ballot.

### **3. NEW BUSINESS**

3.1 Date Code Limitations in the industry for Tantalums . A discussion was held

3.2 Inputs for "All-Chairs Meeting" . Discussions held.

3.2.1 Presentation content at P-Panel Meetings. Discussions held.

3.2.2 How do we get more participation from users, manufacturers and distributors?

3.3 Consider reaffirmation of specification EIA-809 (Solid Tantalum Capacitor Applications Guideline). Voted to reaffirm EIA-809 and to add polymer information.

3.4 Voted to discuss the election of a new vice chair at the next meeting.

### **4.0 Next Meeting**

The next meeting is scheduled to be held during the ECA Fall Engineering Summit October 4-7 Holiday Inn On-the-Bay, San Diego, CA.

### **5.0 Adjournment**

Meeting adjourned at approximately 4:00pm .

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

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David Richardson  
Chairman

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Ed Mikoski  
Acting Secretary