

S-1 Passive Component Steering Committee's Scope: To provide leadership and direction for passive component standards engineering working groups. The Committee will offer an opportunity for creating a unifying environment for interaction between all passive component users and producers.

An attendance sheet was circulated. The attendance was as follows:

Attendees:

NAME	COMPANY
Michael Lauri	IBM
Dave Richardson	Vishay
Len Metzger	Panasonic
Karun Malhotra	Murata Electronics
Phil Diglio	EPCOS
Terry D Charles	Panasonic
Bill Gisseler	TDK
Mike Cannon	TDK
Barney Martin	NEDA
Christine Pollock	Presidio
Dan Giblin	Cooper Bussmann
Carl Lindquist	San-O Industrial Corp
Jayson Young	Kemet Electronics
Dennis Bradley	ECCB
Dave Toomey	Vishay
Laird Macomber	Cornell Dubilier
Michael Griffith	KOA Speer
Kory Schroeder	Stackpole Electronics
Gabriela Szopa	Jabil Circuits
Tebesita Abguelles	Jabil Circuits
Ray Lehman	Vishay
Chris Reynolds	AVX Corp
Mary Carter Berrios	Kemet Electronics

A quorum was present.

Member Organizations Present	Present at this meeting (Fall 2005)	Present at Spring2005 Meeting	Present at Fall 2004 Meeting
AVX	Y	Y	Y
Cooper Bussmann	Y	Y	Y
Cornell Dubilier	Y	Y	Y
Epcos	Y	Y	N
IBM	Y	Y	N
Kemet	Y	Y	Y
KOA Speer	Y	Y	Y

Electronics			
Murata Electronics	Y	Y	Y
Panasonic	Y	Y	Y
San-O-Industrial Corp	Y	Y	Y
SEI Electronics	Y	N	N
TDK	Y	Y	Y
Vishay	Y	Y	Y

Indicates activated as member of committee

Member Organizations Absent	Present at this meeting? (FALL 2005)	Present at Spring 2005 Meeting	Present at Fall 2004 Meeting
ATC	N	Y	Y
Intel<	N	N	Y
Mini-Systems Inc	N	Y	Y
Yageo	N	Y	Y

<Indicates not used in termination of quorum due to record of non-attendance

Other Organizations Present
EIA/ECA
Jabil Circuits
NEDA

1.0 Meeting called to order at 805am

2.1 Membership Introductions were conducted and the roster was circulated.

2.2 Approval of Agenda and previous minutes – Approved

Note: previous minutes had 2 errors that need fixing. Jayson Young's name and Ed Mikoski name.

2.3 Correspondence – Letter was written to Keith Seamands to thank him for his many years of service to ECA, but cannot be delivered due to no contact information.

Chairmen told the group that we had 2 conference calls during the summer to revise the 4 component bulletins. Bulletins were not posted to ECA website timely, there were no comments received by the chairmen, therefore later in the meeting we will vote on each to publish.

2.4 Review of Committee Scope - The current committee scope statement was reviewed. Laird Macomber wanted to clarify the scope. This will be taken up at the next meeting.

3.0 Electronic Component Certification Board – Dennis Bradley ECCB, gave a presentation on the certification process. The ECA CB-954 was adopted as the International document IECQ QC08000. The purpose of this document is for use by customers and users of products to ensure knowledge of the HSF status of a product and to understand the processes by which it is determined. It is also to develop processes to identify, quantify, control and report amounts of HS in the products we build.

See attached presentation to minutes on ECA website.

3.1 Barney Martin of National Electronics Distributors Association (NEDA) gave a presentation on what NEDA is and does for industry. NEDA does very little "standards" type activities, they do discuss their requirements, sometime help write them for other standards organizations like JEDEC and ECA etc. They are not the technical side, but more the business and information management side of the distribution business.

4.0 Mike Griffith KOA gave a presentation on specifications related to measurement of Tin Whisker. Its all documented in JESD22-A121 document. KOA is doing some testing to this document and they want it to be a one-time project and not an ongoing test for various product families.

A recommendation was made to propose a change to the title of this JESD spec to include the word "Actives" type products for JESD 201. We will also propose to STC committee to bring it to JESD committee for consideration. A subcommittee was formed to draft a position statement from S1 that will address this issue to JESD. (Kemet, KOA, Murata, and Vishay will be part of subcommittee)

KOA also showed test results of shelf life associated with lead and lead-free soldering of aged components. This information will be attached to the minutes.

4.1 Karun Malhotra – Murata presented test data on tin whisker growth. The data shows that the tin whisker growth saturates at 500 to 1000 temp cycles. The test conditions that promote the maximum whisker growth are -40C to 85C, 30min cycles. Murata also looked at vibration, drop shock and forced air, no tin whiskers broke off, all stayed in tact.

5.1 PN 5115, CB19A revision was reviewed. A few typo errors were fixed and this document was voted on to move onward. The vote was unanimous to approve and publish this Component Bulletin.

Action Item: EIA to publish final CB19A and post on ECA website

5.2. PN5118 component bulletin "Comments on Test Methods & Criteria for Tin Whiskers in Surface Mounted Passive Devices" was also voted on and approved. The vote was unanimous to approve and publish this Component Bulletin.

Action Item: EIA to publish final CB # and post on ECA website

5.3 PN5117C component Bulletin " Correct Orientation of Tantalum and MLC Capacitors in EIA481" was voted on to move forward. A few typo changes were agreed to and vote was unanimous to publish this document.

Action Item: EIA to publish final CB # and post on ECA website

5.4 PN5116 Component Bulletin " Counterfeit Passive Components" was voted on to move forward. A few typo changes were agreed to and vote was unanimous to publish this document.

Action Item: EIA to publish final CB # and post on ECA website

6.0 New Business – A subcommittee will be formed to address JEDC/INEMI issues on tin whiskers, test methods etc. The subcommittee will be as follows: (Mike Griffith-KOA, Chris Reynolds-AVX, Mary CarterBarios-Kemet, Dave Richardson-Vishay)

The changing of the committee's scope was tabled until the next meeting.

7.0 Future Meetings – The committee voted to go to Reno, Nevada in the fall 2006, with an alternate of San Diego, CA.

8.0 Action Items

1. EIA to publish final CB19A and post on ECA website (PN5115)
2. EIA to publish final CB # and post on ECA website (PN5118)
3. EIA to publish final CB # and post on ECA website (PN5117)
4. EIA to publish final CB # and post on ECA website (PN5116)

9.0 Adjournment – Meeting was adjourned at 11:08AM.