



**Minutes of P-3 Inductive Components Committee**

**Wednesday, September 27, 2006 Silver Legacy Hotel, Reno, NV**

**Scope of the P-3 Committee on Inductive Devices: “This committee covers all types of inductive components regardless of technology used in electronic circuits. It includes Inductors, RF Chokes, Filters, Interference Filters, Inductors and Transformers, Chip Inductors, and Variable Inductors.”**

**1.0 Committee Organization and Procedures**

Meeting was brought to order by Chairman Bill Gisseler @ 8:12 am

Membership & attendance –Sign-in sheet was circulated, attendees were as follows:

Attendees:

<u>NAME</u>	<u>COMPANY</u>
Teri Arguelles	Jabil Circuit, Inc.
Joe Biernacki	Stackpole Electronics
Phil Diglio	Epcos Inc
William Gisseler	TDK
Mike Griffith	KOA
Gonzalo Herrera	Jabil Circuit, Inc
Mike Lauri	IBM
Carl Lindquist	San-O-Industrial Corp
Laird Macomber	Cornell Dubilier
Len Metzger	Panasonic
Ed Mikoski	EIA/ECA
Dave Ritchey	Yageo/Phycomp

<u>Member Organizations Present</u>	<u>Present Reno</u>	<u>Present Ft Lauderdale</u>	<u>Present Memphis</u>
Cornell Dubilier	Y	Y	N
Epcos Inc	Y	Y	Y
IBM	Y	Y	Y

KOA	Y	Y	Y
Panasonic	Y	Y	Y
San-O-Industrial Corp	Y	Y	N
Stackpole	Y	Y	Y
TDK	Y	Y	Y
Yageo	Y	N	N

^Indicates activated as member of committee

<u>Member Organizations Absent</u>	<u>Present Reno</u>	<u>Present Ft Lauderdale</u>	<u>Present Memphis</u>
AEM	N	N	N
Intel Corporation	N	N	N
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 Circuit

Next the minutes from the Spring 2006 meeting were reviewed and a motion was made and seconded to approve the minutes as presented.

The Agenda for this meeting was reviewed and accepted as presented..

Correspondence E-mail was sent to members regarding testing for review per 2.1 below.

## **2.0 Old Business:**

2.1 Followed up the review of test procedures and recommended electrical parameters for SMD Inductors and ferrite beads per the Spring '06 meeting. Received input from 6 manufacturers and all input was different. Discussion ensued about the benefit of standardization and because of the variance it would not be feasible for existing offerings from manufacturers but perhaps a consideration for future products and at a future meeting. Tabled for future discussions, no consensus reached, but agreement was reached to break it down by equipment for consideration. Look into an application guide giving preferred method, or equipment and disclaimers. This will now evolve into an application guide used with the standard. The group agreed to form a working group

on this aspect of the guide. Bill Gisseler requested inputs on an application guide from the members. Vote taken to table the standards for the test fixturing and work on the application guide.

2.2 EIA/ECA - Survey of users- Mike Lauri in attendance - no inputs.

2.3 Review package size and Pad layouts Still pending the P-4 group review and recommendations. Inputs on Size and Layout of Power inductors welcome by Michael Griffith (limited to 4 sizes).

2.4 EIA-958 (PN-5104) Surface Mount Common Mode Chokes was approved and published (Aug 2006).

2.5 Explore development of Marketing report for all Inductors by type ( Similar to capacitors)

2.5.1 - ECA Marketing held August 9th in Arlington, VA.. In 2002 there was a report. There is a primary list of 6 manufacturers a list of 6 secondary and another list of 12 for possible participation.

2.5.2 - Target is to have participation by January 2007. Companies in attendance were favorable. Report would be quarterly.

2.5.3 - Forms will be provided by EIA/ECA to the representative of each manufacturer.

### **3.0 New business and opportunities:**

3.1 Discuss putting together a standard for Power Inductors. Group referred this back to user's group. Mike Lauri of IBM indicated that they are still interested, but have no inputs yet. Lines 3.11 to 3.19 still open and pending.

3.1.1 - Components to consider:

3.1.2 - Mechanical sizes, pad layouts?

3.1.3 - Shielded vs. Non-Standard

3.1.4 - Inductance ranges and tolerances

3.1.5 - Current ranges, saturation

3.1.6 - Rdc

3.1.7 - Impedance

3.1.8 - Temperature ranges

3.1.9 - Anything additional from the customer's side.

3.2 Other New Business or activities

3.2.1 - Michael Griffith and others are still working on recruiting local users to attend ECA meetings with little success. Still a discussion for the all Chairs meeting.

3.2.2 - Additional New Topics or subjects - Discussed at the U1 session that there needs to be a joint effort of all groups EIA, JEDEC, etc.. Need a representative from each P-Group to to represent the passives. Phil Diglio of EPCOS volunteered to represent the P-3 group with Bill Gisseler as backup.

#### **4.0 Next Meeting**

April 16th thru April 19th, San Diego, CA.

#### **5.0 Adjournment**

Motion made, seconded and carried to adjourn – 09:40am

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

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Bill Gisseler  
Chairman

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Phil Diglio  
Secretary