



Minutes of P-3 Committee on Inductive Components

Wednesday, 06 October, 2004 Holiday Inn On the Bay San Diego, CA

Scope of the P-3 Committee on Inductive Devices (approved 10/7/98): This committee covers all types of inductive components regardless of technology used in electronic circuits. It includes inductors, r.f. (chokes, filters, interference filters, inductors and transformers), chip inductors, and variable inductors.

Attendees:

NAME	COMPANY
Daniel H. Chang	AEM
Terry D. Charles	Panasonic
Phil Diglio	Epcos Inc
William Gisseler	TDK
Michael Griffith	KOA
Nick Holmberg	Intel Corporation
Matt Joiner	Cooper Bussmann
Mike Lauri	IBM
Carl Lindquist	San-O-Industrial Corp
Len Metzger	Panasonic
Ed Mikoski	EIA/ECA
Dave Ritchey	Yageo/Phycomp

<u>Member Organizations Present</u>	<u>Present at this meeting</u>	<u>Present at previous meeting?</u>	<u>Present at meeting prior to previous?</u>
AEM	Y	Y	N
Epcos Inc	Y	Y	Y
IBM	Y	N	Y
Intel Corporation	Y	Y	N
KOA	Y	Y	Y

Panasonic	Y	Y	Y
TDK	Y	Y	Y
Yageo	Y	Y	Y

^Indicates activated as member of committee

<u>Member Organizations Absent</u>	<u>Present at This Meeting?</u>	<u>Present at previous meeting?</u>	<u>Present at meeting prior to previous?</u>
AVX*	N	N	N
DSCC	N	N	Y
KRFM America	N	N	Y
Taiyo Yuden	N	Y	Y

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

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

1.0 Committee Organization and Procedures

Meeting was brought to order by Chairman Bill Gisseler @ 8:08 AM

1.1 Membership & attendance – Sign-in sheet was circulated

1.2 Motion was made to amend the Agenda Presented to mention the next location as New Orleans and seconded to accept as amended. Vote taken and motion carried.

1.3 Correspondence –

2.0 Old Business:

2.1) Re-visit proposal to change EIA944 to ANSI Standard (PN4315) tabled until the next meeting

2.2) Re-visit proposal to change EIA945 to ANSI Standard (PN4233) tabled until the next meeting.

2.3) Review Test Procedures and recommended electrical parameters, per last meeting - data was due by May 15th, only one manufacturer provided data. The forms were reviewed again with the attendees for review and a consensus to continue with this data submission for any commonality. This was discussed for both the Ferrite Beads and Inductors. Once compiled we would crunch the numbers for some possibility of creating standards. Date for reply is 11/05/2004. Data to be finalized at the Spring 2005 session.

2.4) EIA/ECA survey of Users/Suppliers (2.3)

2.5) Review package size and layouts – confirm the size options and pad layouts. Each supplier should provide this to Bill Gisseler for the standard EIA SMD packages. The documents should be sent to attendees to be filled out and submitted. Motion was made to add a 1 hour sub-committee, or work session to the May Meeting.

2.6) Characterization of Multilayer (ceramic) inductors at RF Frequencies.

2.7 Lead-Free

2.7.1) – 2.7.5) Discussed Lead Free (Pb –free) activities for inductive devices and beads. No action to be taken by P-3 at this time. The soldering technology committees are working on this.

3.0 New business and opportunities:

3.1 Review package size & Pad Layouts (May 15th), for P-4

3.2 Lead Free Activities:

Bring ideas for discussion at next meeting, P/N schemes, reflow profiles, resistance to soldering heat, etc..

3.3 Power Inductors discussions was placed on the Fall Agenda and will be tabled until the May session for an outline as to what types should be considered. Provide package types and parts of interest for a new EIA standard. Parameters
Would be mechanical size, Inductance range & tolerance, current range, Temp range, Shielded vs. unshielded, RDC, Impedance, Saturation (delta L or I)

3.4 Common mode chokes – Preliminary SMD common mode choke spec will be created by Michael Griffith at KOA for discussion at the next session.

4.0 Next Meeting

New Orleans Spring 2004

5.0 Adjournment

Motion made, seconded and carried to adjourn – 9:58AM

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

Bill Gisseler
Chairman

Phil Diglio
Secretary