

## Minutes of P-3 Committee on Inductive Components

Wednesday, September 26, 2007  
 Holiday Inn Riverwalk, San Antonio, TX

- 1.0 Introductions  
 Chairman Bill Gisseler called the meeting to order at 8:08 am.

**Attendees:**

Name	Company
Laird L. Macomber	Cornell Dubilier
Joe Biernacki	Stackpole
Jim Masui*	Murata Electronics
Ralph Justus	ECA
Mike Lauri	IBM
Carl Linquist	SOC America Inc.
Bill Gisseler	TDK

Member Organizations Present	Present San Antonio	Present San Diego	Present Reno
Cornel Dubilier	Y	Y	Y
Epcos	N	N	Y
IBM	Y	Y	Y
KOA	N	Y	Y
Panasonic	N	N	Y
SOC America Inc.	Y	Y	Y
Stackpole	Y	Y	Y
TDK	Y	Y	Y
Yageo	N	Y	Y

^ indicates activated as member of committee

Member Organizations Absent
AEM*
Intel Corp.*
Taiyo Yuden*

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

Other Organizations Present
EIA / ECA

- 2.0 Committee organization and procedures
- 2.1 Approval of minutes of previous meeting held April 18th in San Diego: Motion made and seconded. Minutes accepted.
  - 2.2 Approval of agenda of current meeting: Motion made and seconded. Agenda accepted.
  - 2.3 Correspondence: None received since past meeting.
- 3.0 Old Business
- 3.1 Development of a power inductor standard

- 3.1.1 Updates from the users side
- 3.1.2 Comments from the committee
  - 3.1.2.1 Attach the "Applications Guide" to the minutes (pending); start with applications, 2<sup>nd</sup> section to be definitions. Plan is to get it up on the ECA board before the next meeting.
  - 3.1.2.2 Review progress starting with section on definitions. Need to review means by which inductors are measured: Typical frequencies; how current is measured; temperature rise with change in inductance, etc.
- 3.2 Progress of the general inductor applications guide.
  - 3.2.1 Updates, ideas and inputs from the committee. First step is outline of what should be included. Case sizes; footprints etc. Carl suggested section on what inductors do, how they work – engineer's viewpoint. Customers are concerned about derating – operating temp vs. ambient temp.
    - 3.2.1.1 What variables will cause inductance to change
    - 3.2.1.2 Interpretation of specifications to allow correct component selection
    - 3.2.1.3 Interpolation from curves
    - 3.2.1.4 Working doc to be Excel sheet
  - 3.2.2 Input from suppliers for working group. Carl suggests someone generate the outline and lead the effort of writing the spec. Need to find someone to lead this effort.
- 4.0 New Business and Opportunities
  - 4.1 Mechanical outlines
    - 4.1.1 Discussion of power inductors
      - 4.1.1.1 Standard footprints review for P-4 from participating suppliers. Each supplier to present its unique footprints to P-3 committee for review. Need to review current outline library to avoid duplication. Need to use Mechanical Outline Application Guide to assure compliance to P-4 requirements.
      - 4.1.1.2 Update for CAD software progress results. Use of DesignCAD.
      - 4.1.1.3 Include common-mode chokes?
        - 4.1.1.3.1 SMD
        - 4.1.1.3.2 Through-hole
  - 4.2 Other new business or activities
    - 4.2.1 Discuss ideas to recruit local users to attend ECA meetings
      - 4.2.1.1 Economic reasons that companies are not sending people to conferences – short-term no-pain cost cutting.
      - 4.2.1.2 Lack of knowledge of the value of info gained at Summits.
      - 4.2.1.3 Internet access to suppliers' web sites – product info.
    - 4.2.2 Any new topics or subjects for discussion
      - 4.2.2.1 Discussion of Phil's comments regarding plastic molded SMD transformer reflow temp profile and PN 5149 (J-STD-075). Discussion of difficulty in meeting the JEDEC requirement for reaching surface temp of these larger-mass parts, while assuring no damage to smaller parts on same board. Mike Lauri suggests possibility of adding generic statement (line item in table) to spec such that users of this type of component should refer to the supplier's product specification to resolve the possible problems with the basic JEDEC Pb-free profile given in the spec. Concern is: At what temperature is the transformer mounted reliably, without damage to the component itself. Need to submit comments, either as P-3 committee or individually.
- 5.0 Discussion of Spring and Fall 2008 dates and meeting location.
- 6.0 Adjournment