



BUREAU OF INDIAN STANDARDS
ELECTRONICS & IT DEPARTMENT

MINUTES	
ELEVENTH MAGNETIC COMPONENT, FERRITE MATERIALS, PIEZOELECTRIC AND FREQUENCY CONTROL DEVICES (LITD 24)	
DATE: 27 Oct 2023 (Friday)	MODE: Virtual
TIME: 10:30 AM to 1:30 PM	VENUE: N.A.
CHAIRPERSON: Dr P. Satheesan	LINK:
MEMBER SECRETARY: Shri Chirag Shah	<u>https://bismanak.webex.com/bismanak/j.php?MTID=m106edfcaac4349d17f164e5592eb2d7b</u>

PRESENT:

Sl. No.	Name	Organisation
i	Dr P. Satheesan (Chair)	Ministry of Electronics and Information Technology, New Delhi
ii	Dr. Palas Halder	Cosmo Ferrites Limited, New Delhi
iii	Dr Ashok K	ISRO Satellite Centre, Bengaluru
iv	Dr. H Sreemoolanadhan	ISRO Satellite Centre, Bengaluru
v	Shri Nitish Kumar	STQC
vi	Shri Probal Mukherjee	Speedofer Components Private Limited, Greater Noida
vii	Shri Sadhab Chandra Ganda	Epcos India Private Limited, New Delhi
viii	Shri. Sanvasi Rao Rupiti	CEMILAC, DRDO
ix	Shri Rajneesh Garg	Indian Printed Circuit Association, Bengaluru
x	Shri Guruprasad C. N.	Bharat Electronics Limited, Bengaluru
xi	Smt Renuka M. Kembhavi	Bharat Electronics Limited, Bengaluru
xii	Shri Sharanappa.B	Bharat Electronics Limited, Bengaluru

Item 0 WELCOME AND OPENING REMARKS

- 0.1 The Member Secretary extended a warm welcome to the participants. He briefed the members on the agenda of the meeting and requested them to kindly introduce themselves.
- 0.2 After introduction of the members, the Member Secretary requested the Chairperson to kindly initiate the proceedings.
- 0.3 The Chairperson welcomed the participants and apprised them of the purpose of the meeting. He exhorted the members to actively participate in the meeting and contribute meaningfully to the formulation of standards under this committee.



Item 1 FORMAL CONFIRMATION OF THE MINUTES OF LAST MEETING

1.1 The Member Secretary informed that the minutes of the 6th meeting of the committee held on 24 Jan 2023 were circulated on 17 May 2023. No comments were received on the minutes. Hence the committee formally confirmed the minutes of the 6th meeting.

Item 2 SCOPE & COMPOSITION OF SECTIONAL COMMITTEE LITD 35

- 2.1 The committee noted its scope as given in item 2.1 of the agenda.
- 2.2 The committee noted its Liaison as given in item 2.2 of the agenda.
- 2.3 New origination/subject experts may be co-opted as technology and scope of standards in this committee.
- 2.4 The committee noted its Composition as given in Annexure 1 of the agenda.
- 2.5 The committee noted the Attendance as given in Annexure 2 of the agenda

Item 3 PROGRAM OF WORK OF LITD 24

3.1 The committee noted the program of work of LITD 24 given in item 3.1 of the agenda.

Item 4 REVIEW OF INDIAN STADNARDS

4.1 **Decisions taken with respect to review of Indian standards is given in the following table:**

S.No.	IS Number	IS Title	Status	Base Standard	Remarks
1	IS 10337 : 1982	32.768 Khz Quartz Crystal	Revised by IEC 60689:2008 Measurement and test	Assistance has been derived from IEC 60689:1980 /IEC Pub	The Committee has decided



		Units for Wrist Watches	methods for tuning fork quartz crystal units in the range from 10 kHz to 200 kHz and standard values	689-1980 'Measurements and test methods for 32 kHz Quartz crystal unit for wrist watches and standard values' issued by the International Electrotechnical Commission.	to revise in Latest style and Format
2	IS 10370 : Part 1 : 1982	Dimensions of mounting accessories of pot cores for wired circuits: Part 1 for pot cores of size 26 x 16 mm	May be revised in latest style and format.	Indigenous	The Committee has decided to revise in Latest style and Format
3	IS 10370 : Part 2 : 1982	Dimensions of mounting accessories of pot cores for wired circuits: Part 2 for pot cores of size 18 x 11 mm	May be revised in latest style and format.	Indigenous	The Committee has decided to revise in Latest style and Format
4	IS 10370 : Part 3 : 1982	Dimensions of mounting accessories of pot cores for wired circuits: Part 3 for pot cores of size 18 x 14 mm	May be revised in latest style and format.	Indigenous	The Committee has decided to revise in latest style and Format
5	IS 10488 : Part 1 : 1983	Specification for frame output transformers used with television picture tubes: Part 1 general	May be revised in latest style and format.	Indigenous	The Committee has decided to archive.



		requirements and tests			
6	IS 10488 : Part 2 : 1983	Specification for frame output transformers used with television picture tubes: Part 2 type for 470, 510, 590 and 610 mm television picture tubes	May be revised in latest style and format.	Indigenous	The Committee has decided to archive.
7	IS 11014 : Part 1 : 1984	Specification for piezoelectric ceramic materials: Part 1 general aspects and methods of measurements	May be revised in latest style and format.	Indigenous	The committee has decided to revise it in Latest style and Format
8	IS 11014 : Part 3 : 1985	Specification for piezoelectric ceramic materials: Part 3 types 4 and 8	May be revised in latest style and format.	Indigenous	The committee has decided to revise it in Latest style and Format
9	IS 11296 : Part 1 : 1986	Method of magnetic testing of TV ferrite components: Part 1 measurement of magnetic properties of beam	May be revised in latest style and format.	Indigenous	The Committee has decided to archive.



		centering magnet			
10	IS 11296 : Part 2 : 1985	Method for magnetic testing of TV ferrite components: Part 2 flux measurement of corner correction magnet	May be revised in latest style and format.	Indigenous	The Committee has decided to archive.
11	IS 11296 : Part 3 : 1985	Method for magnetic testing of TV ferrite components: Part 3 flux measurement of pin cushion correction magnet	May be revised in latest style and format.	Indigenous	The Committee has decided to archive.
12	IS 11299 : 1984	Guide for the selection and use of piezoelectric ceramic materials and elements	May be revised in latest style and format.	Indigenous	The committee has decided to revise it in Latest style and Format.
13	IS 11392 : Part 2 : Sec 1 : 1985	Dimensions of mounting accessories of pot cores for printed circuit board mountings: Part 2 for pot cores of size 26 x 16 (Mm): Sec 1 type 1	May be revised in latest style and format.	Indigenous	The committee has decided to revise it in Latest style and Format.
14	IS 11392 : Part 3 :	Dimensions of mounting accessories	May be revised in latest style and format.	Indigenous	The committee has decided



	Sec 1 : 1985	of pot cores for printed circuit board mountings: Part 3 for pot cores of size 30 x 19 (Mm): Sec 1 type 1			to revise it in Latest style and Format.
15	IS 11455 : Part 1 : Sec 1 : 1985	Outline dimensions of transformers and inductors for use in telecommu- nication and electronic equipment: Part 1 transformers and inductor using yei - Laminations : Sec 1 universal mounting	No Change in Base Standard, hence the Indian Standard May be revised in latest style and format or the International standard may be adopted as Identical adoption.	Based on IEC 60852- 1:1986	The committee has decided to revise it in Latest style and Format.
16	IS 11455 : Part 1 : Sec 2 : 1986	Outline dimensions of transformers and inductors for use in telecommu- nication and electronic equipment: Part 1 transformers and inductors using yei - Laminations : Sec 2 u -	No Change in Base Standard, hence the Indian Standard May be revised in latest style and format or the International standard may be adopted as Identical adoption.	Based on IEC 60852- 1:1986	The committee has decided to revise it in Latest style and Format.



		Clamp mounting			
17	IS 11455 : Part 1 : Sec 3 : 1985	Outline dimensions of transformers and inductors for use in telecommunication and electronic equipment: Part 1 transformers and inductors using yei - Laminations : Sec 3 printed wiring board mounting	No Change in Base Standard, hence the Indian Standard May be revised in latest style and format or the International standard may be adopted as Identical adoption.	Based on IEC 60852-1:1986	The committee has decided to revise it in Latest style and Format.
18	IS 11455 : Part 2 : 1988	Outline dimensions of transformers and inductors for use in telecommunication and electronic equipment: Part 2 transformers and inductors using yex - 2 laminations for printed circuit board mounting	No Change in Base Standard, hence the Indian Standard May be revised in latest style and format or the International standard may be adopted as Identical adoption.	Largely based on IEC 60852-2:1992	The committee has decided to revise it in Latest style and Format.
19	IS 11455 :	Outline dimensions of	No Change in Base Standard, hence the Indian Standard May be revised in	Largely based on 60852-5:1994	The committee has decided



	Part 4 : 1992	transformers and inductors for use in telecommunication and electronic equipment: Part 4 transformers and inductors using Q - Series of c - Cores	latest style and format or the International standard may be adopted as Identical adoption.		to revise it in Latest style and Format.
20	IS 11658 : 1986	General requirements and methods of tests of piezoelectric ceramic pressure transducers - Dynamic type	May be revised in latest style and format.	Indigenous	The Committee has decided to revise it in Latest style and Format.
21	IS 13674 : Part 1 : 1998	Dimensions of ferrite components for CTV: Part 1 cores for deflection coil	May be revised in latest style and format.	Indigenous	The committee has decided to revise it in Latest style and Format.
22	IS 13674 : Part 2 : 1993	Dimensions of ferrite components for CTV: Part 2 cores for line output transformers	May be revised in latest style and format.	Indigenous	The committee has decided to revise it in Latest style and Format.
23	IS 13674 : Part 3 : 1993	Dimensions of ferrite components for CTV:	May be revised in latest style and format.	Indigenous	The committee has decided to revise it in



		Part 3 cores for SMPS transformer			Latest style and Format.
24	IS 13898 : 1993	Dimensions of coil formers of transformers and inductors for use in telecommunication and electronic equipment	No Change in Base Standard, hence the Indian Standard May be revised in latest style and format or the International standard may be adopted as Identical adoption.	Based on IEC 61797-1:1996	The committee has decided to revise it in Latest style and Format.
25	IS 13901 : Part 2 : 1993	Dimensions of ferrite components for CTV: Part 2 cores for line output transformers	May be revised in latest style and format.	Indigenous	The Committee has decided to revise it in Latest style and Format.
26	IS 13909 : 1993	Dimensions of pm - Cores made of magnetic oxides and associated Parts	Replaced by IEC 63093-10:2022 May be superseded by latest International standard.	Based on IEC 61247:1995	The committee has agreed to Supersede it by IEC 63093-10:2022
27	IS 1885 : Part 41 : 1975	Electrotechnical vocabulary: Part xli non - Reciprocal electromagnetic components	Replaced by IEC 60050-221:1990. May be superseded by latest International standard.	Based on IEC 60050-901A:1975	The committee has agreed to Supersede it by IEC 60050-221:1990.
28	IS 6537 : 1972	Guide to the use of temperature control devices for crystal units	Already Superseded by IS/IEC 60122-4 : 2019 in portal	IEC 60314A:1971	No action Required
29	IS 8271 : Part 5	Quartz crystal units	5955-05:2010 https://ddpdos.gov.in/docu	Indigenous Based on JSS 50910-	The committee



	: Sec 15 : 1990	used for frequency control and selection - Specification: Part 5 series CX for oscillators: Sec 15 quartz crystal unit type CX - 15	ments/jss?page=58 May be superseded by <u>latest Indian recommendation.</u>	1971 issued by the Directorate of Standardization, Ministry of Defence, India	has agreed to Supersede it by JSS <u>5955-05:2010</u>
30	IS 8271 : Part 6 : Sec 5 : 1991	Quartz crystal units used for frequency control and selection specification : Part 8 series BF for oscillators: Sec 5 quartz crystal unit type BF - 05	<u>JSS 50911 : 2020 (Second Revision)</u> https://ddpdos.gov.in/documents/jss?page=14 May be superseded by <u>latest Indian recommendation.</u>	Indigenous Based on JSS 50911 (1971) issued by the Directorate of Standardization, Ministry of Defence, India	The committee has agreed to Supersede it by JSS <u>50911 : 2020</u>
31	IS 9819 : Part 1 : 1981	Specification for line output transformers (Eht) used with TV picture tubes: Part 1 general requirements and tests	May be revised in latest style and format.	Indigenous	The Committee has decided to archive.
32	IS 9819 : Part 2 : 1982	Specification for line output transformers used with TV picture tubes: Part ii type lot 1s for 470 mm, 510 mm,	May be revised in latest style and format.	Indigenous	The Committee has decided to archive.



		590 mm and 610 mm TV picture tubes			
33	IS 9819 : Part 3 : 1982	Specification for line output transformers (Eht) used with TV picture tubes: Part 3 type lot 1h for 470 mm, 510 mm, 590 mm and 610 mm TV picture tubes	May be revised in latest style and format.	Indigenous	The Committee has decided to archive.
34	IS 9819 : Part 4 : 1984	Specification for line output transformer (Eht) used with TV picture tubes: Part 4 type lot 2s for 310 mm and 340 mm TV picture tubes	May be revised in latest style and format.	Indigenous	The Committee has decided to archive.
35	IS 9819 : Part 5 : 1989	Specification for line output transformers (Eht) Used with TV - Picture tubes: Part 5 lot for colour picture tubes	May be revised in latest style and format./No information found on internet	Assistance has been derived from STQC/CTVCOMP-II/86 'Specification for line output transformers used with 510 mm colour picture tubes', issued by STQC Directorate of Department of Electronics.	The Committee has decided to archive.
36	IS 9946 : 1981	Tests for magnetic properties of ferrite aerial rods	May be revised in latest style and format.	Indigenous	The Committee has decided to revise it in



					Latest style and Format.
37	IS/IEC 60556 : 2016	Gyromagnetic materials intended for application at microwave frequencies Measuring methods for properties	No action required/may be reaffirmed	Identical with IEC 60556:2006+AMD1:2016 CSV	The committee has decided to reaffirm.
38	IS/QC 260100 : 1998	Transformers and inductors for use in electronic and telecommunication equipment: Part 2 Secal specification for signal transformers on the basis of capability approval procedure	May be revised in latest style and format	Identical with IEC 61248-2:1996 /QC 260100:1996	The Committee has decided to revise it in Latest style and Format.
39	IS/QC 260200 : 1999	Transformers and inductors for use in electronic and telecommunication equipment: Part 3 Secal specification for power transformers on the basis of capability approval procedure	May be revised in latest style and format	Identical with IEC 61248-3:1996 / QC 260200 /1996	The Committee has decided to revise it in Latest style and Format.



40	IS/QC 680100 : 1995	Quartz crystal units - A specification in the IEC quality assessment system for electronic components (IECQ) – Secal specification - Capability approval	May be revised in latest style and format	Identical with IEC 61178-2:1993 /QC 680100:1993	The Committee has decided to revise it in Latest style and Format.
41	IS/QC 680101 : 1995	Quartz crystal units - A specification in the IEC quality assessment system for electronic components (IECQ) - Blank detail specification - Capability approval	May be revised in latest style and format	Identical with IEC 61178-2-1/QC 680101:1993	The Committee has decided to revise it in Latest style and Format.
42	IS 6297 : Part 1 : 1971	Specificalio n for transformers and inductors (Power, Audio, Pulse And Switching) for electronic equipment: Part 1 general requirement s and tests	Feedback has been received from the manufacturers and laboratories that the test methods mentioned in this standard are not being used. This standard can be useful to researchers but not to the industry.	IS 6297 Part 1 : 1971 may be updated to incorporate the test procedures listed in IEC 61007 : 2020. A panel comprising three committee members may be constituted to revise the standard suitably.	The committee has decided to constitute a panel for review of this standard.



43	IS 9344 : 1979	Dimensions of toroidal strip - Wound cores of magnetically soft material	<p>IS 9344: 1979 is essential and should be retained as a national standard to define the tolerances for dimensions Of Toroidal Strip-Wound Cores. However, the title of IS 9344 should be changed to “TOROIDAL STRIP-WOUND CORES MADE OF MAGNETICALLY SOFT MATERIAL” to fully represent the scope of the standard. It should also cover the protection of cores.</p> <p>Designation of alloys used for Toroidal Strip-Wound Cores (as indicated in IEC 60404-1) and new material such as nano-crystalline alloys may be covered in table 1 of IS 9344.</p> <p>In case of boxed core, protection should include filling the space between core and the case with a damping material to avoid change in electrical characteristics under shock and vibration.</p>	The standard may be revised in accordance with the remarks given. A panel comprising three committee members may be duly constituted in consultation with the Chairperson within to revise the standard suitably.	The committee has decided to constitute a panel for review of this standard.
44	IS 11014 : Part 2 : 1984	Specification for piezoelectric ceramic materials: Part 2 types 1 and 5	The parameters as given in Table 1 of IS 11014 part needs to be modified based on application areas and IS 11014 part 3 and 4 also need to be bifurcated as per application areas to update the changes in the corresponding IS. Hence, input may be sought from manufacturers and laboratories to further update the contents.	The standard may be revised in accordance with the remarks given. A panel comprising three committee members may be duly constituted in consultation with the Chairperson to revise the standard suitably.	The committee has decided to constitute a panel for review of this standard.
45	IS 6297 : Part 2 : 1973	Specification for transformers	Feedback has been received from the manufacturers that the test	The standard may be revised in accordance with the remarks given.	The committee has decided



		and ,inductors (Power, Audio, Pulse And Switching) for electronic equipment: Part 2 power transformers	methods mentioned in the standard are not being used by the industry although IS 14870 :2000 is being used. It may be aligned with IEC 61007 : 2020 as it contains the advanced test methods that might be helpful for industries. Alternately, this standard may be withdrawn and the basic standard IS 14870 : 2000 may be revised as per IEC 61007 : 2020.	A panel comprising three committee members may be duly constituted in consultation with the Chairperson to revise the standard suitably.	to constitute a panel for review of this standard.
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Item 5 GUIDELINES ON RESEARCH PROJECTS

- (i) The committee noted the Guidelines on Research Projects.
- (ii) It was questioned that can BIS offer a Subsidized rate for testing in the Government approved labs/ERTLs for R & D activities in MSME.
- (iii) The Member Secretary informed that the TOR is limited to Standardization activities and he will communicate the same to the higher authorities.
- (iv) The Member Secretary requested to the member organizations to propose various R & D projects.

Item 6 INTERNATIONAL STANDARDIZATION ACTIVITIES

The committee noted the International committees, it Working Groups and link to the list of Standards given in Item 6 of Agenda.



Item 7 PROCESS REFORMS IN STANDARDIZATION ACTIVITY OF BIS

The Member Secretary informed the committee members about various process reforms in standardization activity of BIS such as the rolling annual action plan for the year 2023-24.

Item 8 DATE AND PLACE FOR THE NEXT MEETING

8.1 It was decided that the next meeting of the committee may be held tentatively in February 2024. The actual date will be decided in consultation with the Chairperson.

Item 9 ANY OTHER BUSINESS

9.1 There being no other business, the meeting ended with a hearty vote of thanks to the participants and the Chairperson.

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LITD 08 11th Meeting Minutes

