



BSI Standards Publication

Process management for avionics - Electronic components for aerospace, defence and high performance (ADHP) applications

Part 2: General requirements for passive components

National foreword

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The UK participation in its preparation was entrusted to Technical Committee GEL/107, Process management for avionics.

A list of organizations represented on this committee can be obtained on request to its secretary.

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TECHNICAL SPECIFICATION

**Process management for avionics – Electronic components for aerospace,
defence and high performance (ADHP) applications –
Part 2: General requirements for passive components**

INTERNATIONAL
ELECTROTECHNICAL
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CONTENTS

FOREWORD.....	5
INTRODUCTION.....	7
1 Scope.....	8
2 Normative references	8
3 Terms, definitions and abbreviated terms	8
3.1 Terms and definitions.....	8
3.2 Abbreviated terms.....	11
4 Technical requirements	12
4.1 General.....	12
4.1.1 Overview	12
4.1.2 Equivalent methods	13
4.2 Procedures	13
4.2.1 General	13
4.2.2 Product discontinuance	14
4.2.3 ESD protection during manufacture	14
4.2.4 Traceability.....	14
4.3 Shipment controls.....	14
4.3.1 General	14
4.3.2 Unit pack container	14
4.3.3 Intermediate packing	14
4.3.4 Date codes	15
4.3.5 Moisture sensitivity level (MSL)	15
4.3.6 Lead-free marking	15
4.3.7 Labels	15
4.3.8 Electrostatic discharge (ESD).....	16
4.4 Product or process change notification (PCN).....	16
4.4.1 General	16
4.4.2 Notification	17
4.4.3 Notification details	17
4.5 Electrical.....	17
4.5.1 General	17
4.5.2 Electrical test.....	17
4.6 Mechanical	17
4.6.1 General	17
4.6.2 Device marking.....	18
4.6.3 Lead-free components	18
4.6.4 Moisture sensitivity	18
4.6.5 Termination finishes	18
4.6.6 Termination finish notification of change	19
4.7 Audit capability	19
4.7.1 General	19
4.7.2 Internal quality audits	19
4.7.3 Subcontract manufacturing	19
4.8 Quality assurance	19
4.8.1 General	19
4.8.2 Quality system.....	20
4.8.3 Sampling plans	20

4.8.4	Failure analysis support.....	20
4.8.5	Outgoing quality	20
4.9	Qualification.....	20
4.9.1	General	20
4.9.2	Methodology.....	21
4.9.3	Test samples	24
4.9.4	Qualification categories	24
4.9.5	Maintenance of qualification standard.....	24
4.9.6	In-process test results	25
4.9.7	Test references	25
4.9.8	Qualification report	25
4.9.9	Archiving	25
4.9.10	Qualification of device changes	25
4.9.11	Similarity assessment.....	25
4.10	Product monitoring in the production line	26
4.10.1	General	26
4.10.2	Monitoring programme.....	26
4.10.3	Problem notification.....	26
4.10.4	Data reporting.....	26
4.11	Environmental health and safety (EHS).....	26
4.11.1	General	26
4.11.2	General EHS compliance.....	27
4.11.3	Device handling.....	27
4.11.4	Device materials and substances.....	27
Annex A (informative) Test code (TC) information for guidance.....		28
A.1	General.....	28
A.2	TC1 – Electrical test.....	28
A.3	TC2 – External visual.....	28
A.4	TC3 – Package dimensions.....	29
A.5	TC4 – High temperature exposure (storage)	30
A.6	TC5 – Temperature cycling	30
A.7	TC6 – Moisture resistance	30
A.8	TC7 – Biased humidity.....	30
A.9	TC8 – High temperature operating life.....	30
A.10	TC9 – Terminal strength (lead).....	31
A.11	TC10-Resistance to solvents	31
A.12	TC11 – Mechanical shock	31
A.13	TC12 – Vibration.....	31
A.14	TC13 – Resistance to heat.....	31
A.15	TC14 – Thermal shock	32
A.16	TC15 – Board flex (SMD).....	32
A.17	TC16 – Beam load	32
A.18	TC17 – Solderability	32
A.19	TC18 – Electrostatic discharge	32
A.20	TC19 – Flammability	32
A.21	TC20 – Terminal strength (SMD).....	32
A.22	TC21 – Surge voltage	32
A.23	TC22 – Hermeticity	33
A.24	TC23 – Tin whisker	33

Annex B (informative) Typical IECQ-CECC approved components	34
Annex C (informative) Typical USA military specified passive components.....	36
Annex D (informative) Typical automotive components	37
Annex E (informative) Typical IEC specified passive components	39
E.1 Typical IEC passive component specifications	39
E.2 IEC passive component environmental test methods.....	39
Annex F (informative) Verification requirements matrix for IEC TS 62686-2	46
Bibliography.....	55
Table 1 – Label requirements.....	16
Table 2 – Internal quality audit areas	19
Table 3 – Technology/family qualification and device qualification	22
Table 4 – Qualification tests for device types	23
Table D.1 – AEC-Q200 temperature grades	37
Table E.1 – IEC passive specifications' environmental test methods compared to those specified in Table 3	40
Table F.1 – Verification requirements matrix for IEC TS 62686-2	46

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**PROCESS MANAGEMENT FOR AVIONICS – ELECTRONIC
COMPONENTS FOR AEROSPACE, DEFENCE AND
HIGH PERFORMANCE (ADHP) APPLICATIONS –****Part 2: General requirements for passive components**

FOREWORD

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- the subject is still under technical development or where, for any other reason, there is the future but no immediate possibility of an agreement on an International Standard.

Technical specifications are subject to review within three years of publication to decide whether they can be transformed into International Standards.

IEC TS 62686-2 which is a technical specification, has been prepared by IEC technical committee 107: Process management for avionics.

This first edition cancels and replaces the first edition of IEC PAS 62686-2 published in 2016. This edition constitutes a technical revision.

The text of this technical specification is based on the following documents:

Enquiry draft	Report on voting
107/302/DTS	107/343/RVDTS

Full information on the voting for the approval of this technical specification can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all the parts in the IEC 62686 series, published under the general title *Process management for avionics – Electronic components for aerospace, defence and high performance (ADHP) applications*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

INTRODUCTION

This part IEC 62686 includes all the requirements of the obsolete STACK Specification S/0003 issue 2 related to passive components and contains revisions for alternative qualification test methods and additional test information for the aerospace, defence and high performance (ADHP) industries. This document is typically used in conjunction with IEC TS 62239-1.

NOTE With the addition of alternative methods, it is possible for manufacturers to be audited by IECQ under the new IECQ automotive scheme or IECQ approved component scheme.

PROCESS MANAGEMENT FOR AVIONICS – ELECTRONIC COMPONENTS FOR AEROSPACE, DEFENCE AND HIGH PERFORMANCE (ADHP) APPLICATIONS –

Part 2: General requirements for passive components

1 Scope

This part of IEC 62686 defines the minimum requirements for general purpose "off-the-shelf" COTS (commercial off-the-shelf) passive components for aerospace, defence and high performance (ADHP) applications.

This document applies to all passive components that can be operated in ADHP applications within the manufacturers' publicly available data sheet limits in conjunction with IEC TS 62239-1. This document can be used by other high performance and high reliability industries, at their discretion.

ADHP application requirements are not necessarily fulfilled by this document alone. ADHP original equipment manufacturers (OEMs) could consider redesigning their products or conducting further testing to verify suitability in ADHP applications using their procedures for satisfying their electronic component management plan (ECMP) (see IEC TS 62239-1).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

JESD48, *Product discontinuance*

J-STD-609B, *Marking, symbols, and labels of leaded and lead-free terminal finished materials used in electronic assembly*

3 Terms, definitions and abbreviated terms

3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>.

3.1.1

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