DIN EN 16602-60-13:2023-10 (E)

Space product assurance - Commercial, electrical, electronic and electromechanical (EEE) components; English version EN 16602-60-13:2023

Table of contents

European Foreword 5

Introduction 6

1 Scope 8

2 Normative references 9

3 Terms, definitions and abbreviated terms 11

3.1 Terms from other standards 11

3.2 Terms specific to the present standard 11

3.3 Abbreviated terms 12

3.4 Conventions 13

3.5 Nomenclature 14

3.6 Convention for the Applicability Matrix 15

4 Requirements for class 1 components 16

5 Requirements for class 2 components 28

6 Requirements for class 3 components 39

7 Quality levels 50

8 Evaluation, screening and LAT tests 51

9 Pure tin lead finish – risk analysis 93

Annex A (normative) Component control plan (CCP) - DRD 94

Annex B (normative) Declared components list (DCL) - DRD 95

Annex C (normative) Internal Supplier's specification - DRD 96

Annex D (normative) Parts approval document - DRD 97

Annex E (informative) EEE documents delivery per review 98

Annex F (normative) Justification document - DRD 99

Annex G <<deleted>> 102

Annex H (informative) Flow chart for construction analysis 103

Bibliography..... 106

Figures

Figure 4-1: <<deleted>> 20
Figure 4-2: <<deleted>> 23
Figure 5-1: <<deleted>> 32
Figure 5-2: <<deleted>> 35
Figure 6-1: <<deleted>> 45
Figure 8-1: <<deleted>> 51
Figure 8-2: <<deleted>> 51
Figure 8-3: <<deleted>> 51
Figure 8-4: <<deleted>> 51
Figure 8-5: <<deleted>> 51
Figure 8-6: <<deleted>> 51

Tables

Table 4–1: <<deleted and moved as legacy test files as Table 8–9>> 20
Table 4–2: <<deleted and moved as legacy test files as Table 8–10>> 23
Table 4–3: <<deleted and moved as legacy test files as Table 8–11>> 23
Table 4-4: Documentation for Class 1 components 27
Table 5–1: <<deleted and moved as Legacy test files as Table 8–12>> 32
Table 5–2: <<deleted and moved as Legacy test files as Table 8–13>> 34
Table 5–3: <<deleted and moved to Legacy test files as Table 8–14>> 35
Table 5–4: Documentation for Class 2 components 38
Table 6–1: <<deleted>> 42
Table 6–2: <<deleted>> 44
Table 6–3: <<deleted and moved as Legacy test files Table 8–15>> 45
Table 6–4: Documentation for Class 3 components 48
Table 8–1: Procurement test table for ceramic capacitors chips 54
Table 8–2: Procurement test table for solid electrolyte tantalum capacitors chips.....56
Table 8–3: Procurement test table for discrete parts (diodes, transistors, optocouplers) 58
Table 8–4: Procurement test table for fuses 60
Table 8–5: Procurement test table for magnetics.....63
Table 8–6: Procurement test table for microcircuits 66
Table 8–7: Procurement test table for resistor chips.....68

Table 8–8: Procurement test table for Thermistors 71
Table 8–9: Legacy test files - Evaluation tests for Class 1 components - Active parts .74
Table 8–10: Legacy test files - Screening tests for Class 1 components - Active parts 77
Table 8–11: Legacy test files - Lot acceptance tests for Class 1 components - Active parts 79
Table 8–12: Legacy test files - Evaluation tests - Class 2 components - Active parts ..82
Table 8–13: Legacy test files - Screening tests - Class 2 components - Active parts ...85
Table 8–14: Legacy test files - Lot acceptance tests - Class 2 components – Active parts 87
Table 8–15: Legacy test files - LAT tests - Class 3 components - Active parts 90
Table H-1 : <<deleted>>.....103
Table H-2 : Construction analysis sequence.....104