Fabricated Parts and Assemblies Requirements

Document Number   SPEC_E23044

Triad RF Systems Proprietary

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0	ECN231780	5/16/23
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Contents

Contents

1.   Overview

This document defines the common/default requirements and specifications for fabricated parts and assemblies (Item).

2.   Referenced Documents

SPEC_E21014   Labeling Requirement (Triad RF Systems)

MIL-DTL-5541   Military Specification, Chemical Conversion Coatings on Aluminium and Aluminium Alloy

MIL-A-8625   Military Specification, Anodic Coatings for Aluminium and Aluminium Alloys

3.   Order of Precedence

Where a conflict may arise, the following order of precedence shall apply:

1.   Item drawing (DWG_)

2.   Item model (MDL_)

3.   This specification (SPEC_E23044)

4.   Assembly bill of material (BOM)

5.   Assembly drawing (AD_)

6.   SPEC_E21014

7.   Referenced industry standards, government documents and directives

4.   Item Design Package

Minimally, the Item design package consists of the Item drawing (DWG_), and model (MDL_).

Candidate MAKE/BUY design packages may also include a bill of material (BOM), and assembly drawing (AD_).

4.1   Item Drawing (DWG_)

The Item drawing (DWG_) typically identifies: materials, finishes, special dimensions/tolerances, thread size/features, lot-marking locations, parts, and other information not readily conveyed in the (MDL_).

4.1.1   Common Item Drawing Notes (DWG_)

The following notes shall apply unless otherwise specified in the (DWG_). Unique requirements not identified by this specification are also noted in the (DWG_).

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A. LABEL REQUIREMENTS PER SPEC_E21014.

B. DIMENSIONS ARE IN MILS (0.001 IN).

C. DIMENSIONS DO NOT INCLUDE FINAL SURFACE FINISH.

D. STANDARD TOLERANCES:

      MODEL (MDL_), RELATIVE TO THE DATUM SHOWN:  ±0.005 MILS

      3 DECIMAL PLACES SHOWN, X.XXX:              ±0.005 MILS

      2 DECIMAL PLACES SHOWN, X.XX:               ±0.01  MILS

      ANGULAR DIMENSIONS:                         ±1/2°

      FOR REFERENCE, NO TOLERANCE:                REF

E. REMOVE ALL BURRS AND SHARP EDGES.

F. FINISH TYPES
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NAME	SURFACE FINISH	SURFACE ROUGHNESS
TYPE A	NONE	VISIBLE MACHINE MARKS ARE ACCEPTABLE HOWEVER, SURFACE SHOULD BE SMOOTH TO THE TOUCH. (63Ra MICROINCHES)
TYPE B	MIL-DTL-5541 TYPE II CLASS 3	VISIBLE MACHINE MARKS ARE ACCEPTABLE HOWEVER, SURFACE SHOULD BE SMOOTH TO THE TOUCH. (63Ra MICROINCHES)
TYPE C	MIL-DTL-5541 TYPE II CLASS 3	COMMERCIAL #4 (40Ra-60Ra Microinches)
TYPE D	MIL-A-8625 TYPE III CLASS 2 BLACK COLOR	COMMERCIAL #4 (40Ra-60Ra Microinches)

4.2   Item Model (MDL_)

The Item model (MDL_) is the primary design artifact. File format is (.STP/.STEP).

4.3   Assembly Bill of Material (BOM)

The bill of materials (BOM) is the list of parts and material for Items configured as MAKE/BUY.

4.4   Assembly Drawing (AD_)

The assembly drawing (AD_) shows the location and installation of parts and materials for Items configured as MAKE/BUY.