



MIL-DTL-83413/7F  
W/AMENDMENT 2

Inches	mm	Inches	mm	Inches	mm
.003	0.08	.113	2.87	.75	19.1
.004	0.10	.125	3.18	.84	21.3
.010	0.25	.130	3.30	.88	22.4
.031	0.79	.130	3.30	1.25	31.4
.062	1.57	.203	5.16	1.50	38.1
.078	1.98	.205	6.35	2.80	76.1
.080	2.03	.380	9.70	3.20	81.3
.090	2.29	.500	12.70	4.13	104.9

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Surface toughness: If cast, smooth cast finish 125 or 250 all over, except machine surface 63.
4. Remove all burrs and sharp edges .010 (0.25 mm) to .020 (0.51 mm) radius.
5. Unless otherwise specified, tolerance is  $\pm .03$  (0.8 mm) on decimals and  $\pm 1^\circ$  on angles.

FIGURE 1. Grounding clamp, for types I and III grounding assemblies - Continued.

REQUIREMENTS:

Material:

Handle: The handle material shall be of aluminum or aluminum alloy and shall be in accordance with ASTM B26/B26M, ASTM B85/B85M, ASTM B108/B108M, ASTM B209, ASTM B211, ASTM B221 and ASTM B241/B241M.

Spring: The spring material shall be .125 diameter music wire and meet the spring requirements of MIL-DTL-83413.

Set screw: The set screw shall meet the requirements of AIA/NASM51021, and shall be passivated in accordance with SAE-AMS 2700.

Jaw: The jaw material shall be steel and meet the material requirements of MIL-DTL-83413.

Alternate jaw material: MPIF FX - 1008-110HT in accordance with Metal Powder Industries Federation, 105 College Road East, Princeton, New Jersey 08540.

Jaw teeth inner radius: The .75 R dimension on figure 1 shall be measured from the (point, apex, tip) on the first tooth to the (point, apex, tip) on the last tooth.

Clamp connector resistance: Shall not exceed 500 milliohms when tested in accordance with MIL-DTL-83413.

Part or Identifying Number (PIN): M83413/7-1.

Salt atmosphere (corrosion): Not applicable.

NOTE: This aluminum part will not pass a Salt Spray test. If your application demands salt atmosphere resistance use PIN M83413/12-1, see MIL-DTL-83413/12.

MIL-DTL-83413/7F  
W/AMENDMENT 2

QUALIFICATION:

Qualification is not required.

FIRST ARTICLE TEST:

First article inspection shall consist of a visual and mechanical inspection in accordance with MIL-DTL-83413 and the requirements stated in this specification sheet.

Samples for first article inspection shall be representative of the products proposed to be furnished to this specification. Test samples, consisting of 12 grounding clamps shall be examined and tested in accordance with this specification. Test results shall be submitted to the acquiring activity.

Changes from previous issue. The margins of this amendment are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the previous issue.

Referenced documents. In addition to MIL-DTL-83413, this document references the following:

MIL-DTI-83413/12	ASTM B26/B26M
AIA/NASM51021	ASTM B85/B85M
MPIF FX-1008-110HT	ASTM B108/B108M
SAE-AMS 2700	ASTM B209
	ASTM B211
	ASTM B221
	ASTM B241/B241M

CONCLUDING MATERIAL

Custodians:

Army - AV  
Navy - AS  
Air Force - 85  
DLA - CC

Preparing activity:  
DLA - CC

(Project 5999-2016-004)

Review activities:

Army - AR, CR, CR4, MI  
Navy - MC  
Air Force - 13, 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.