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REV.  
H

AS3481™

FEDERAL SUPPLY CLASS  
5310

# RATIONALE

FIGURE REDRAWN, RESTRUCTURE NOTES 1, 2, AND 3 FOR CLARITY, AND ADD EXCEPTION FOR RECRYSTALLIZED MICROSTRUCTURE, GENERAL EDITORIAL AND FORMAT CHANGES.

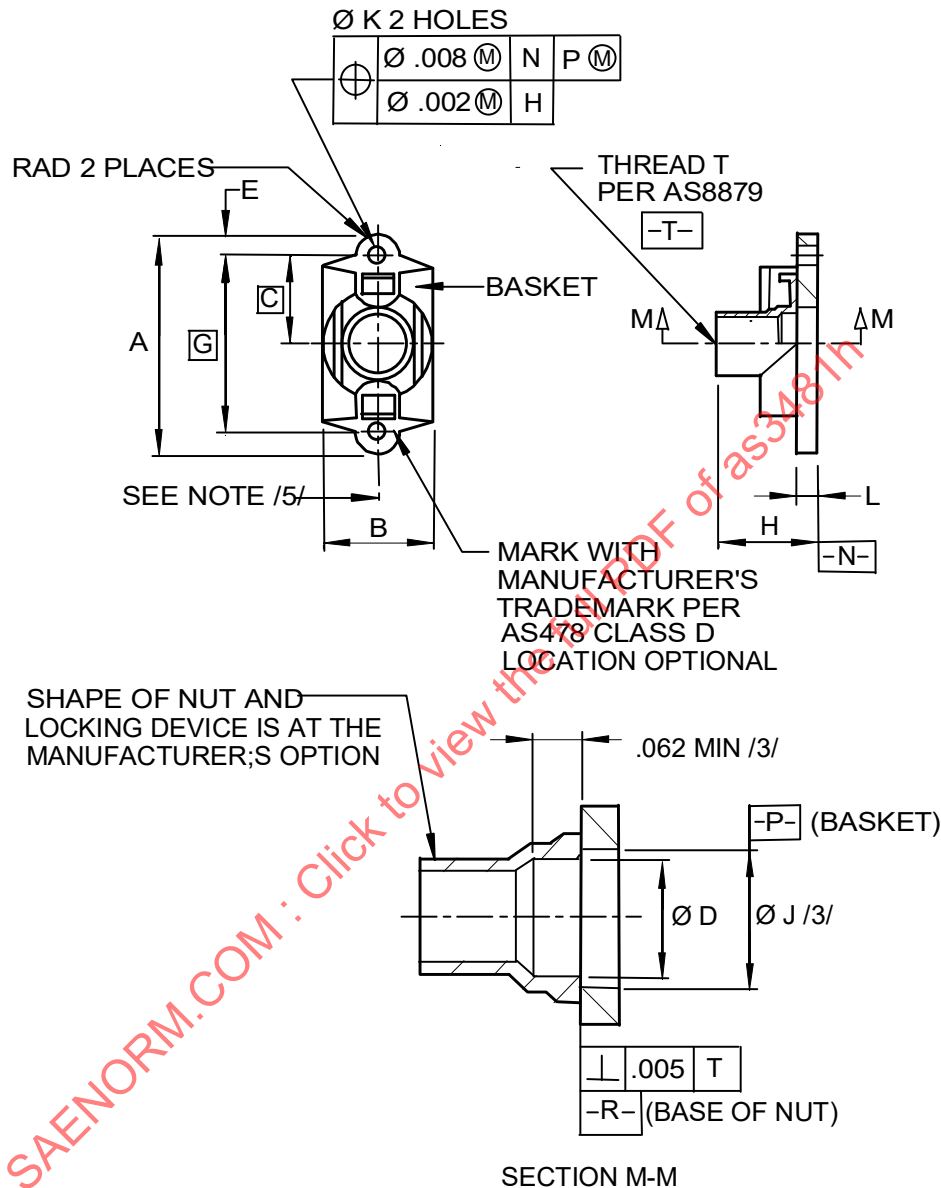
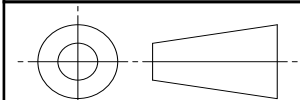


FIGURE 1

For more information on this standard, visit  
<https://www.sae.org/standards/content/AS3481H/>

THIRD ANGLE PROJECTION



CUSTODIAN: E-25

PROCUREMENT SPECIFICATION: AS4393



## AEROSPACE STANDARD

(R) NUT, SELF-LOCKING, PLATE, TWO LUG,  
 FLOATING, REDUCED RIVET SPACING, LOW HEIGHT,  
 UNS S66286, CLASS: 125 KSI/800 °F

AS3481™  
 SHEET 1 OF 3

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TABLE 1A - DIMENSIONS T TO H

| PART<br>NUMBER | T<br>THREAD     | A<br>MAX | B         | C    | ØD<br>COUNTERBORE<br>MIN | E<br>MIN | H<br>MAX |
|----------------|-----------------|----------|-----------|------|--------------------------|----------|----------|
| AS3481-01      | .1380-32UNJC-3B | .682     | .290-.357 | .218 | --                       | .070     | .171     |
| AS3481-02      | .1640-32UNJC-3B | .707     | .290-.367 | .234 | .168                     | .100     | .250     |
| AS3481-03      | .1900-32UNJF-3B | .739     | .290-.416 | .250 | .194                     | .100     | .250     |
| AS3481-04      | .2500-28UNJF-3B | .801     | .350-.500 | .281 | .254                     | .100     | .281     |
| AS3481-05      | .3125-24UNJF-3B | 1.010    | .412-.581 | .359 | .317                     | .117     | .328     |

TABLE 1B - DIMENSIONS G TO MASS

| PART<br>NUMBER | G<br>BASIC | ØK<br>+.005<br>-.000 | ØJ<br>/3/ /5/ | L         | AXIAL<br>STRENGTH<br>LBF MIN | APPROX<br>MASS<br>LB/100 |
|----------------|------------|----------------------|---------------|-----------|------------------------------|--------------------------|
| AS3481-01      | .437       | .098                 | .178-.270     | .020-.090 | 1130                         | .32                      |
| AS3481-02      | .468       | .098                 | .204-.270     | .025-.090 | 1720                         | .36                      |
| AS3481-03      | .500       | .098                 | .230-.270     | .025-.090 | 2460                         | .39                      |
| AS3481-04      | .562       | .098                 | .290-.330     | .027-.090 | 4580                         | .69                      |
| AS3481-05      | .718       | .130                 | .352-.392     | .032-.105 | 7390                         | 1.10                     |

## NOTES:

## 1. MATERIAL:

- a. NUT: CORROSION AND HEAT RESISTANT STEEL AMS5525, AMS5731, OR AMS5734.
- b. BASKET: CORROSION AND HEAT RESISTANT STEEL AMS5525 (COMPOSITION SIMILAR TO UNS S66286).

## /2/ PROCUREMENT SPECIFICATION: AS4393, EXCEPT AS NOTED:

- a. HEAT TREATMENT: AFTER FORMING, PLATE NUTS SHALL BE PRECIPITATION HEAT TREATED TO A HARDNESS NOT TO EXCEED THAT SPECIFIED IN NOTE 2d.
- b. NUT: SILVER PLATE PER AS2411; SILVER PLATE ONLY ON THREADS, EXCEPT:  
 SIZE -.01 MAY HAVE OPTIONAL COVERAGE ON COUNTERSINK.  
 SIZE -.02 THROUGH -.05 MAY HAVE OPTIONAL COVERAGE IN COUNTERBORE TO .030 MAXIMUM DEPTH.  
 DIMENSIONS APPLY AFTER PLATING.  
 BASKET: PASSIVATE PER AMS2700 TYPE 2 OR 8.
- c. BAKE AT 800 °F ± 15 °F IN LIEU OF 1200 °F ± 15 °F FOR NUTS TESTED AFTER BAKE.
- d. HARDNESS: 44 HRC MAXIMUM
- e. COMPLETELY RECRYSTALLIZED MICROSTRUCTURE IS NOT REQUIRED.

## /3/ SIZE -.01 MAY BE COUNTERSUNK OR RADIUSSED WITHIN ØJ. SIZE -.02 AND LARGER SHALL BE COUNTERBORED TO ØD TO .062 MINIMUM DEPTH.

## 4. RADIAL FLOAT OF NUT THREADS RELATIVE TO BASKET ØJ, .020 MINIMUM.

## /5/ ØJ TO BE CENTERED ON WIDTH B WITHIN ±.010.

## 6 REMOVE BURRS AND SHARP EDGES.

## 7. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M. REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICROINCHES Ra.

## 8. DIMENSIONING AND TOLERANCING: ANSI Y14.5M-1982 (ASME PUBLICATION).

|                                                                                     |                                                                                                                             |                                |                   |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------|
|  | <b>AEROSPACE STANDARD</b>                                                                                                   | <b>AS3481™</b><br>SHEET 2 OF 3 | <b>REV.<br/>H</b> |
|                                                                                     | (R) NUT, SELF-LOCKING, PLATE, TWO LUG,<br>FLOATING, REDUCED RIVET SPACING, LOW HEIGHT,<br>UNS S66286, CLASS: 125 KSI/800 °F |                                |                   |