

AS9319A HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

ANY REQUIREMENTS ASSOCIATED WITH QUALIFIED PRODUCTS LIST (QPL) MAY CONTINUE TO BE MANDATORY FOR DOD CONTRACTS. REQUIREMENTS RELATING TO QPL'S HAVE BEEN ADOPTED BY THE SAE FOR THIS STANDARD AND ARE NOT PART OF THIS SAE DOCUMENT.

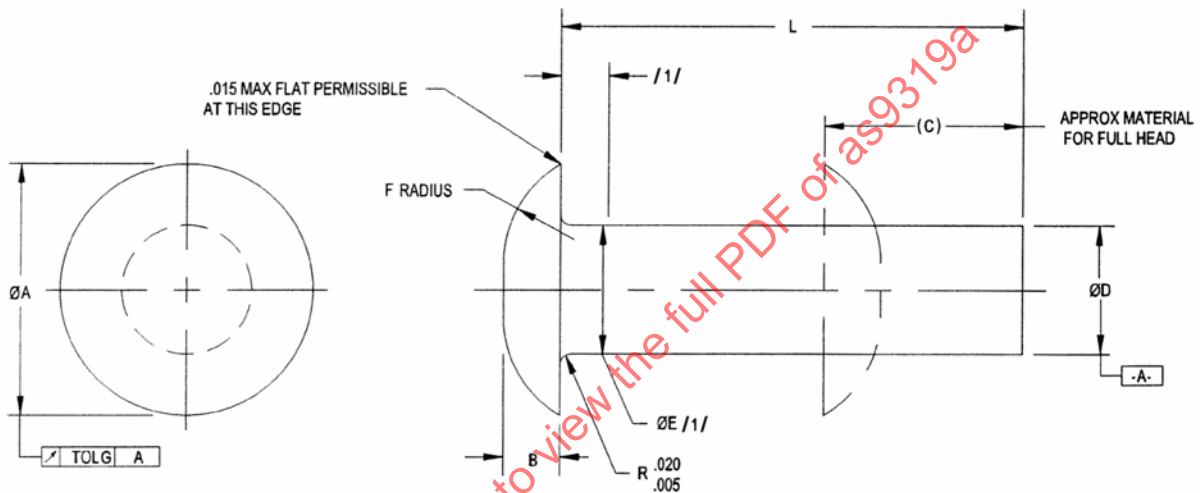
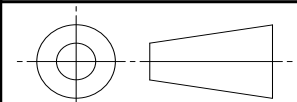


FIGURE 1 - RIVET

TABLE 1 - DIMENSIONS

| NOMINAL<br>SIZE Ø | ØA        | B    |      | (C)  | ØD        | ØE        | F<br>±.010 | TOL<br>(G) |
|-------------------|-----------|------|------|------|-----------|-----------|------------|------------|
|                   |           | MIN  | MAX  |      |           |           |            |            |
| .062              | .119-.131 | .027 | .037 | .094 | .061-.063 | .061-.064 | .054       | .010       |
| .094              | .179-.197 | .040 | .050 | .141 | .093-.095 | .093-.096 | .082       | .010       |
| .125              | .238-.262 | .054 | .064 | .188 | .123-.126 | .123-.128 | .108       | .010       |
| .156              | .296-.328 | .067 | .077 | .234 | .154-.157 | .154-.159 | .135       | .015       |
| .188              | .356-.394 | .080 | .090 | .281 | .186-.189 | .186-.191 | .164       | .015       |
| .250              | .475-.525 | .107 | .117 | .375 | .248-.252 | .248-.254 | .217       | .020       |
| .312              | .594-.656 | .133 | .143 | .469 | .310-.314 | .310-.316 | .272       | .020       |
| .375              | .713-.787 | .161 | .171 | .562 | .373-.377 | .373-.379 | .328       | .020       |

### THIRD ANGLE PROJECTION



PROCUREMENT SPECIFICATION: AS7233

## AEROSPACE STANDARD

**SAE** AS9319  
SHEET 1 OF 4

**REV.**  
**A**

TABLE 2 - DIMENSIONS AND PART NUMBERS

| NOM<br>SIZE | Ø.062      |                             | Ø.094      |                             | Ø.125      |                             | Ø.156      |                             |
|-------------|------------|-----------------------------|------------|-----------------------------|------------|-----------------------------|------------|-----------------------------|
| L<br>±.010  | PART NO.   | APPROX.<br>WEIGHT<br>LB/100 | PART NO.   | APPROX.<br>WEIGHT<br>LB/100 | PART NO.   | APPROX.<br>WEIGHT<br>LB/100 | PART NO.   | APPROX.<br>WEIGHT<br>LB/100 |
| .125        | MS9319-002 | .02                         |            |                             |            |                             |            |                             |
| .156        | MS9319-003 | .02                         |            |                             |            |                             |            |                             |
| .188        | MS9319-004 | .02                         | MS9319-050 | .06                         | MS9319-096 | .13                         |            |                             |
| .219        | MS9319-005 | .03                         | MS9319-051 | .07                         | MS9319-097 | .14                         |            |                             |
| .250        | MS9319-006 | .03                         | MS9319-052 | .08                         | MS9319-098 | .15                         | MS9319-144 | .24                         |
| .281        | MS9319-007 | .03                         | MS9319-053 | .08                         | MS9319-099 | .16                         | MS9319-145 | .26                         |
| .312        | MS9319-008 | .04                         | MS9319-054 | .09                         | MS9319-100 | .17                         | MS9319-146 | .28                         |
| .344        | MS9319-009 | .04                         | MS9319-055 | .10                         | MS9319-101 | .19                         | MS9319-147 | .30                         |
| .375        | MS9319-010 | .04                         | MS9319-056 | .10                         | MS9319-102 | .20                         | MS9319-148 | .32                         |
| .406        | MS9319-011 | .04                         | MS9319-057 | .11                         | MS9319-103 | .21                         | MS9319-149 | .34                         |
| .438        | MS9319-012 | .05                         | MS9319-058 | .12                         | MS9319-104 | .22                         | MS9319-150 | .36                         |
| .469        | MS9319-013 | .05                         | MS9319-059 | .12                         | MS9319-105 | .24                         | MS9319-151 | .38                         |
| .500        | MS9319-014 | .05                         | MS9319-060 | .13                         | MS9319-106 | .25                         | MS9319-152 | .40                         |
| .531        | MS9319-015 | .06                         | MS9319-061 | .14                         | MS9319-107 | .26                         | MS9319-153 | .42                         |
| .562        | MS9319-016 | .06                         | MS9319-062 | .14                         | MS9319-108 | .27                         | MS9319-154 | .44                         |
| .594        | MS9319-017 | .06                         | MS9319-063 | .15                         | MS9319-109 | .29                         | MS9319-155 | .46                         |
| .625        | MS9319-018 | .07                         | MS9319-064 | .16                         | MS9319-110 | .30                         | MS9319-156 | .48                         |
| .656        |            |                             | MS9319-065 | .17                         | MS9319-111 | .31                         | MS9319-157 | .50                         |
| .688        |            |                             | MS9319-066 | .17                         | MS9319-112 | .32                         | MS9319-158 | .52                         |
| .719        |            |                             | MS9319-067 | .18                         | MS9319-113 | .34                         | MS9319-159 | .53                         |
| .750        |            |                             | MS9319-068 | .19                         | MS9319-114 | .35                         | MS9319-160 | .55                         |
| .812        |            |                             | MS9319-070 | .20                         | MS9319-116 | .37                         | MS9319-162 | .59                         |
| .875        |            |                             | MS9319-072 | .21                         | MS9319-118 | .40                         | MS9319-164 | .63                         |
| .938        |            |                             | MS9319-074 | .23                         | MS9319-120 | .42                         | MS9319-166 | .67                         |
| 1.000       |            |                             | MS9319-076 | .24                         | MS9319-122 | .45                         | MS9319-168 | .71                         |
| 1.062       |            |                             |            |                             | MS9319-124 | .47                         | MS9319-170 | .75                         |
| 1.125       |            |                             |            |                             | MS9319-126 | .50                         | MS9319-172 | .79                         |
| 1.188       |            |                             |            |                             | MS9319-128 | .52                         | MS9319-174 | .83                         |
| 1.250       |            |                             |            |                             | MS9319-130 | .55                         | MS9319-176 | .86                         |
| 1.312       |            |                             |            |                             | MS9319-132 | .58                         | MS9319-178 | .90                         |
| 1.375       |            |                             |            |                             | MS9319-134 | .60                         | MS9319-180 | .94                         |
| 1.438       |            |                             |            |                             | MS9319-136 | .62                         | MS9319-182 | .98                         |
| 1.500       |            |                             |            |                             | MS9319-138 | .65                         | MS9319-184 | 1.02                        |

TABLE 2 - DIMENSIONS AND PART NUMBERS (CONTINUED)

| NOM<br>SIZE | Ø.188      |                             | Ø.250      |                             | Ø.312      |                             | Ø.375      |                             |
|-------------|------------|-----------------------------|------------|-----------------------------|------------|-----------------------------|------------|-----------------------------|
| L<br>±.010  | PART NO.   | APPROX.<br>WEIGHT<br>LB/100 | PART NO.   | APPROX.<br>WEIGHT<br>LB/100 | PART NO.   | APPROX.<br>WEIGHT<br>LB/100 | PART NO.   | APPROX.<br>WEIGHT<br>LB/100 |
| .125        |            |                             |            |                             |            |                             |            |                             |
| .156        |            |                             |            |                             |            |                             |            |                             |
| .188        |            |                             |            |                             |            |                             |            |                             |
| .219        |            |                             |            |                             |            |                             |            |                             |
| .250        | MS9319-190 | .38                         |            |                             |            |                             |            |                             |
| .281        | MS9319-191 | .41                         |            |                             |            |                             |            |                             |
| .312        | MS9319-192 | .44                         | MS9319-238 | .89                         |            |                             |            |                             |
| .344        | MS9319-193 | .47                         | MS9319-239 | .94                         |            |                             |            |                             |
| .375        | MS9319-194 | .50                         | MS9319-240 | .99                         |            |                             |            |                             |
| .406        | MS9319-195 | .53                         | MS9319-241 | 1.04                        |            |                             |            |                             |
| .438        | MS9319-196 | .54                         | MS9319-242 | 1.09                        |            |                             |            |                             |
| .469        | MS9319-197 | .58                         | MS9319-243 | 1.14                        |            |                             |            |                             |
| .500        | MS9319-198 | .61                         | MS9319-244 | 1.19                        |            |                             |            |                             |
| .531        | MS9319-199 | .64                         | MS9319-245 | 1.24                        |            |                             |            |                             |
| .562        | MS9319-200 | .67                         | MS9319-246 | 1.29                        | MS9319-292 | 2.15                        |            |                             |
| .594        | MS9319-201 | .69                         | MS9319-247 | 1.34                        | MS9319-293 | 2.23                        |            |                             |
| .625        | MS9319-202 | .72                         | MS9319-248 | 1.39                        | MS9319-294 | 2.31                        |            |                             |
| .656        | MS9319-203 | .75                         | MS9319-249 | 1.44                        | MS9319-295 | 2.39                        |            |                             |
| .688        | MS9319-204 | .78                         | MS9319-250 | 1.49                        | MS9319-296 | 2.47                        |            |                             |
| .719        | MS9319-205 | .81                         | MS9319-251 | 1.54                        | MS9319-297 | 2.54                        |            |                             |
| .750        | MS9319-206 | .83                         | MS9319-252 | 1.59                        | MS9319-298 | 2.62                        | MS9319-344 | 4.00                        |
| .812        | MS9319-208 | .89                         | MS9319-254 | 1.69                        | MS9319-300 | 2.77                        | MS9319-346 | 4.22                        |
| .875        | MS9319-210 | .95                         | MS9319-256 | 1.79                        | MS9319-302 | 2.93                        | MS9319-348 | 4.45                        |
| .938        | MS9319-212 | 1.00                        | MS9319-258 | 1.89                        | MS9319-304 | 3.09                        | MS9319-350 | 4.68                        |
| 1.000       | MS9319-214 | 1.06                        | MS9319-260 | 1.99                        | MS9319-306 | 3.25                        | MS9319-352 | 4.90                        |
| 1.062       | MS9319-216 | 1.12                        | MS9319-262 | 2.09                        | MS9319-306 | 3.41                        | MS9319-354 | 5.11                        |
| 1.125       | MS9319-218 | 1.17                        | MS9319-264 | 2.19                        | MS9319-310 | 3.57                        | MS9319-356 | 5.35                        |
| 1.188       | MS9319-220 | 1.23                        | MS9319-266 | 2.29                        | MS9319-312 | 3.71                        | MS9319-358 | 5.56                        |
| 1.250       | MS9319-222 | 1.28                        | MS9319-268 | 2.39                        | MS9319-314 | 3.87                        | MS9319-360 | 5.80                        |
| 1.312       | MS9319-224 | 1.34                        | MS9319-270 | 2.49                        | MS9319-316 | 4.03                        | MS9319-362 | 6.04                        |
| 1.375       | MS9319-226 | 1.39                        | MS9319-272 | 2.59                        | MS9319-318 | 4.19                        | MS9319-364 | 6.25                        |
| 1.438       | MS9319-228 | 1.45                        | MS9319-274 | 2.69                        | MS9319-320 | 4.34                        | MS9319-366 | 6.48                        |
| 1.500       | MS9319-230 | 1.51                        | MS9319-276 | 2.79                        | MS9319-322 | 4.50                        | MS9319-368 | 6.70                        |