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AF 11, 85, 17 @ 19, 14 Army MEL, MU  
Navy WP, SH @ MC

This military standard is approved by the Department of Defense and is mandatory on all activities. Selection for all new engineering and design applications and for repetitive use shall be made from this document

| CASE, MOUNTING, TERMINAL ARRANGEMENT, AND MARKING  |       |  |        | FED. SUP CLASS<br>5950  |    |        |    |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |       |       |       |      |       |       |        |      |       |       |        |       |       |     |       |       |       |  |  |  |  |
|--|-------|--|--------|---|----|--------|----|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|-------|-------|-------|------|-------|-------|--------|------|-------|-------|--------|-------|-------|-----|-------|-------|-------|--|--|--|--|
|  |       |  |        | <p>CIRCUIT DIAGRAM AND MARKING<br/>READABLE WITH TRANSFORMER<br/>IN THIS POSITION (SEE NOTE 5)</p> <p>MINIMUM CHASSIS CUTOUT</p>  |    |        |    |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |       |       |       |      |       |       |        |      |       |       |        |       |       |     |       |       |       |  |  |  |  |
|  |       |  |        | <p>60 CPS</p> <p>11 10 9 8 7 6 5</p> <p>125 V 4<br/>115 V 3<br/>105 V 2</p> <p>108 AMP RMS<br/>MAX THROUGH<br/>(1-3)<br/>0 V 1</p> <p>WORKING<br/>VOLTAGE<br/>175 V MAX</p> <p>6.3 V, 5 AMP RMS<br/>WORKING<br/>VOLTAGE: 175 V MAX</p> <p>5 V, 3 AMP RMS<br/>WORKING VOLTAGE:<br/>460 V MAX</p> <p>650 V RMS CT,<br/>.15 AMP DC TO<br/>INDUCTIVE INPUT<br/>FILTER</p> <p>WORKING<br/>VOLTAGE<br/>460 V MAX</p> <p>MAX ALTITUDE: 10,000 FT</p> |    |        |    |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |       |       |       |      |       |       |        |      |       |       |        |       |       |     |       |       |       |  |  |  |  |
| <table border="1"> <thead> <tr> <th>INCHES</th> <th>MM</th> <th>INCHES</th> <th>MM</th> </tr> </thead> <tbody> <tr><td>.156</td><td>3.96</td><td>1.500</td><td>38.10</td></tr> <tr><td>.188</td><td>4.78</td><td>2.250</td><td>57.15</td></tr> <tr><td>.228</td><td>5.79</td><td>2.438</td><td>61.93</td></tr> <tr><td>.250</td><td>6.35</td><td>2.594</td><td>65.89</td></tr> <tr><td>.375</td><td>9.53</td><td>3.000</td><td>76.20</td></tr> <tr><td>.562</td><td>14.27</td><td>3.375</td><td>85.73</td></tr> <tr><td>.750</td><td>19.05</td><td>3.938</td><td>100.03</td></tr> <tr><td>.938</td><td>23.83</td><td>4.312</td><td>109.52</td></tr> <tr><td>1.219</td><td>30.96</td><td>1/2</td><td>12.70</td></tr> <tr><td>1.375</td><td>34.93</td><td></td><td></td></tr> </tbody> </table>  |       |  |        | INCHES  | MM | INCHES | MM | .156 | 3.96 | 1.500 | 38.10 | .188 | 4.78 | 2.250 | 57.15 | .228 | 5.79 | 2.438 | 61.93 | .250 | 6.35 | 2.594 | 65.89 | .375 | 9.53 | 3.000 | 76.20 | .562 | 14.27 | 3.375 | 85.73 | .750 | 19.05 | 3.938 | 100.03 | .938 | 23.83 | 4.312 | 109.52 | 1.219 | 30.96 | 1/2 | 12.70 | 1.375 | 34.93 |  |  |  |  |
| INCHES   | MM    | INCHES   | MM     |   |    |        |    |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |       |       |       |      |       |       |        |      |       |       |        |       |       |     |       |       |       |  |  |  |  |
| .156   | 3.96  | 1.500  | 38.10  |   |    |        |    |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |       |       |       |      |       |       |        |      |       |       |        |       |       |     |       |       |       |  |  |  |  |
| .188   | 4.78  | 2.250  | 57.15  |   |    |        |    |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |       |       |       |      |       |       |        |      |       |       |        |       |       |     |       |       |       |  |  |  |  |
| .228   | 5.79  | 2.438  | 61.93  |   |    |        |    |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |       |       |       |      |       |       |        |      |       |       |        |       |       |     |       |       |       |  |  |  |  |
| .250   | 6.35  | 2.594  | 65.89  |   |    |        |    |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |       |       |       |      |       |       |        |      |       |       |        |       |       |     |       |       |       |  |  |  |  |
| .375   | 9.53  | 3.000  | 76.20  |   |    |        |    |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |       |       |       |      |       |       |        |      |       |       |        |       |       |     |       |       |       |  |  |  |  |
| .562   | 14.27 | 3.375  | 85.73  |   |    |        |    |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |       |       |       |      |       |       |        |      |       |       |        |       |       |     |       |       |       |  |  |  |  |
| .750   | 19.05 | 3.938  | 100.03 |   |    |        |    |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |       |       |       |      |       |       |        |      |       |       |        |       |       |     |       |       |       |  |  |  |  |
| .938   | 23.83 | 4.312  | 109.52 |   |    |        |    |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |       |       |       |      |       |       |        |      |       |       |        |       |       |     |       |       |       |  |  |  |  |
| 1.219  | 30.96 | 1/2  | 12.70  |   |    |        |    |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |       |       |       |      |       |       |        |      |       |       |        |       |       |     |       |       |       |  |  |  |  |
| 1.375  | 34.93 |  |        |   |    |        |    |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |       |       |       |      |       |       |        |      |       |       |        |       |       |     |       |       |       |  |  |  |  |
| <p>Ⓢ CANCELED AFTER<br/>USE MIL-T-27/30.1-01</p>   |       |  |        |   |    |        |    |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |       |       |       |      |       |       |        |      |       |       |        |       |       |     |       |       |       |  |  |  |  |
| <p>NOTES:</p> <ol style="list-style-type: none"> <li>1. All dimensions in inches.</li> <li>2. Unless otherwise specified, tolerance on overall case dimensions is <math>\pm .000</math> (.00 mm), <math>-.125</math> (3.18 mm).</li> <li>3. Tolerance on mounting dimensions is <math>\pm .031</math> (.79 mm). Mounting studs are symmetrically located with respect to the centerlines of the case.</li> <li>4. Tolerance on terminal positioning dimensions is <math>\pm .125</math> (3.18 mm). Terminals fit within minimum chassis cutout.</li> <li>5. Type designation, MS part no. and manufacturer's name or code symbol to be marked on side opposite terminals.</li> <li>6. Referenced document shall be of the issue in effect on date of invitations for bid.</li> <li>7. For design feature purposes, this standard takes precedence over procurement document referenced herein.</li> <li>8. Metric equivalents (to the nearest .01 mm) are shown for general information only and are based upon 1 inch = 25.4 mm.</li> </ol> |       |  |        |   |    |        |    |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |       |       |       |      |       |       |        |      |       |       |        |       |       |     |       |       |       |  |  |  |  |
| <p>MS PART NO. MS90028-2</p>   |       |  |        |   |    |        |    |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |       |       |       |      |       |       |        |      |       |       |        |       |       |     |       |       |       |  |  |  |  |
| <p>P.A. Army - ER<br/>Other Cust Navy - EC<br/>Air Force - 85</p>  |       | <p>TITLE<br/>TRANSFORMER, POWER, STEP-DOWN, AND<br/>STEP-UP, TYPE TF4RX03KB006</p> |        | <p>MILITARY STANDARD<br/><b>MS 90028</b></p>  |    |        |    |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |       |       |       |      |       |       |        |      |       |       |        |       |       |     |       |       |       |  |  |  |  |
| <p>Procurement Specification<br/>MIL-T-27</p>  |       | <p>SUPERSEDES:</p>   |        | <p>SHEET 1 OF 2</p>   |    |        |    |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |      |       |       |      |       |       |       |      |       |       |        |      |       |       |        |       |       |     |       |       |       |  |  |  |  |

DD FORM 672  
25 OCT 63

(Coordinated) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

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APPROVED 2 OCT 1952 REVISED 16 NOV 1953 9 DEC 1955 17 DEC 1956 19 FEB 1960 21 Sep 65 26 MAY 1982