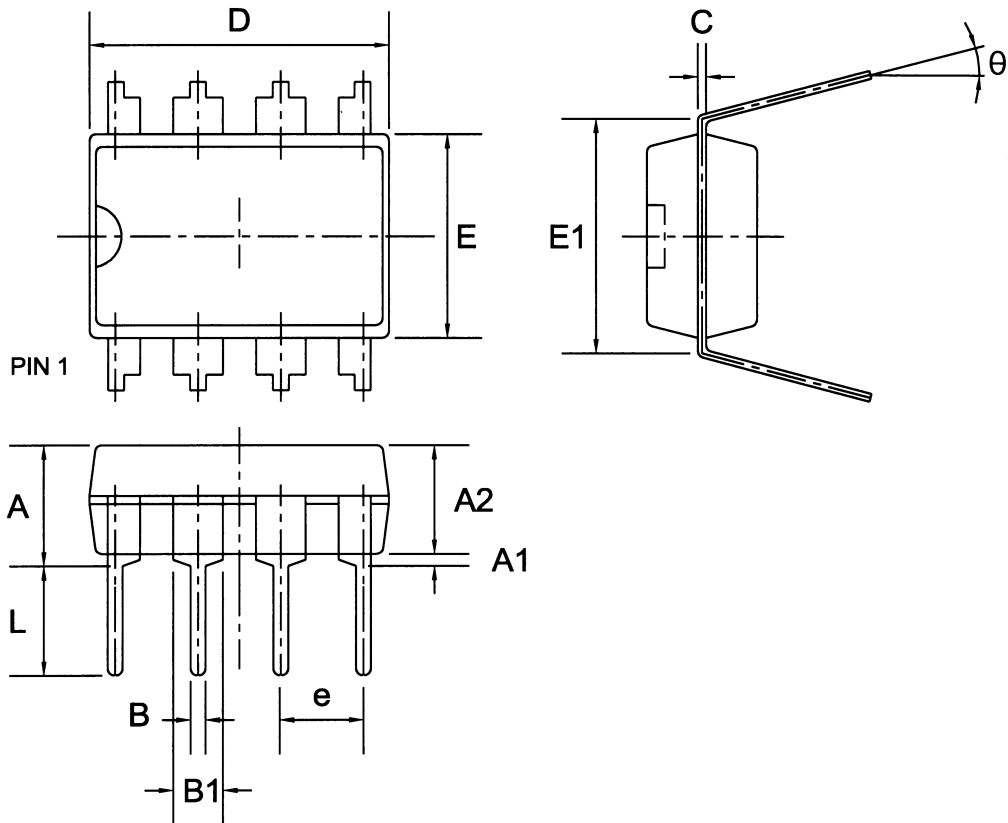


## DIMENSION

DIP-8 DIMENSION (FIG. NO. DIM-DIP8-0103-B)

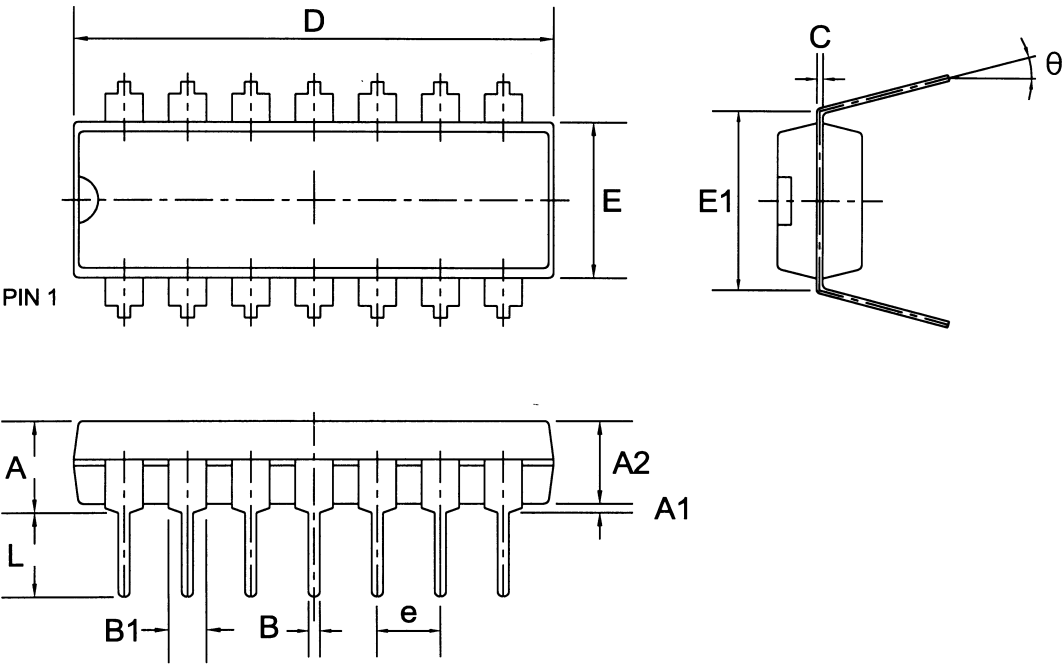


| Symbol | Dimensions In Millimeters |      |      | Dimensions In Inches |       |       |
|--------|---------------------------|------|------|----------------------|-------|-------|
|        | Min                       | Nom  | Max  | Min                  | Nom   | Max   |
| A      | —                         | —    | 4.31 | —                    | —     | 0.170 |
| A1     | 0.38                      | —    | —    | 0.015                | —     | —     |
| A2     | 3.15                      | 3.40 | 3.65 | 0.124                | 0.134 | 0.144 |
| B      | 0.38                      | 0.46 | 0.51 | 0.015                | 0.018 | 0.020 |
| B1     | 1.27                      | 1.52 | 1.77 | 0.050                | 0.060 | 0.070 |
| C      | 0.20                      | 0.25 | 0.30 | 0.008                | 0.010 | 0.012 |
| D      | 8.95                      | 9.20 | 9.45 | 0.352                | 0.362 | 0.372 |
| E      | 6.15                      | 6.40 | 6.65 | 0.242                | 0.252 | 0.262 |
| E1     | —                         | 7.62 | —    | —                    | 0.300 | —     |
| e      | —                         | 2.54 | —    | —                    | 0.100 | —     |
| L      | 3.00                      | 3.30 | 3.65 | 0.118                | 0.130 | 0.142 |
| θ      | 0°                        | —    | 15°  | 0°                   | —     | 15°   |

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# DIMENSION

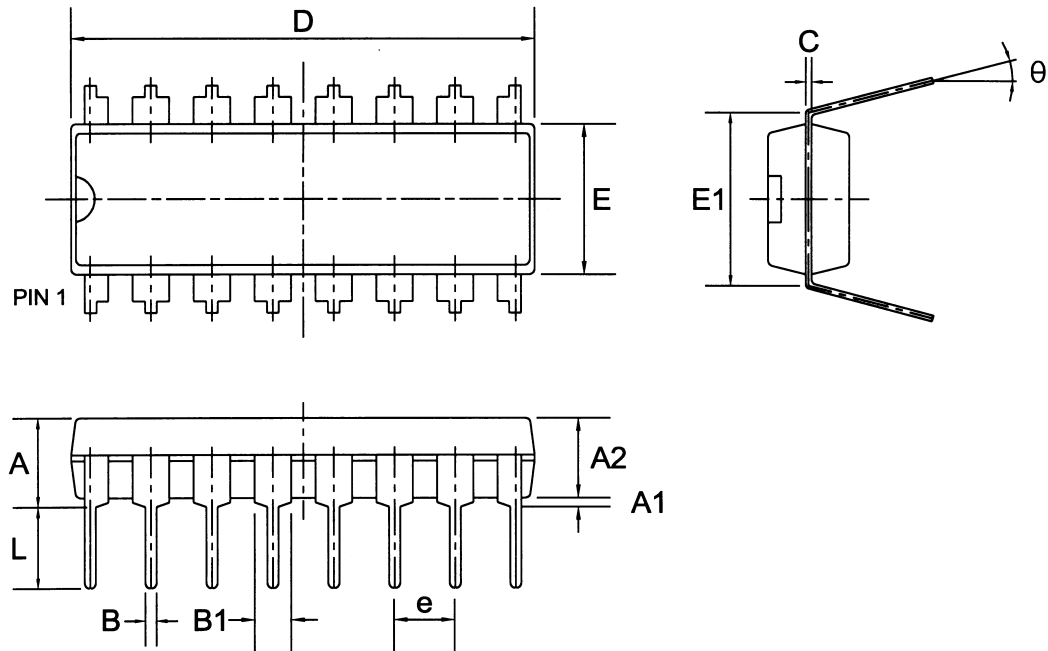
DIP-14 DIMENSION (FIG. NO. DIM-DIP14-0103-B)



| Symbol   | Dimensions In Millimeters |       |       | Dimensions In Inches |       |       |
|----------|---------------------------|-------|-------|----------------------|-------|-------|
|          | Min                       | Nom   | Max   | Min                  | Nom   | Max   |
| A        | —                         | —     | 4.31  | —                    | —     | 0.170 |
| A1       | 0.38                      | —     | —     | 0.015                | —     | —     |
| A2       | 3.15                      | 3.40  | 3.65  | 0.124                | 0.134 | 0.144 |
| B        | —                         | 0.46  | —     | —                    | 0.018 | —     |
| B1       | —                         | 1.52  | —     | —                    | 0.060 | —     |
| C        | —                         | 0.25  | —     | —                    | 0.010 | —     |
| D        | 19.00                     | 19.30 | 19.60 | 0.748                | 0.760 | 0.772 |
| E        | 6.20                      | 6.40  | 6.60  | 0.244                | 0.252 | 0.260 |
| E1       | —                         | 7.62  | —     | —                    | 0.300 | —     |
| e        | —                         | 2.54  | —     | —                    | 0.100 | —     |
| L        | 3.00                      | 3.30  | 3.60  | 0.118                | 0.130 | 0.142 |
| $\theta$ | 0°                        | —     | 15°   | 0°                   | —     | 15°   |

# DIMENSION

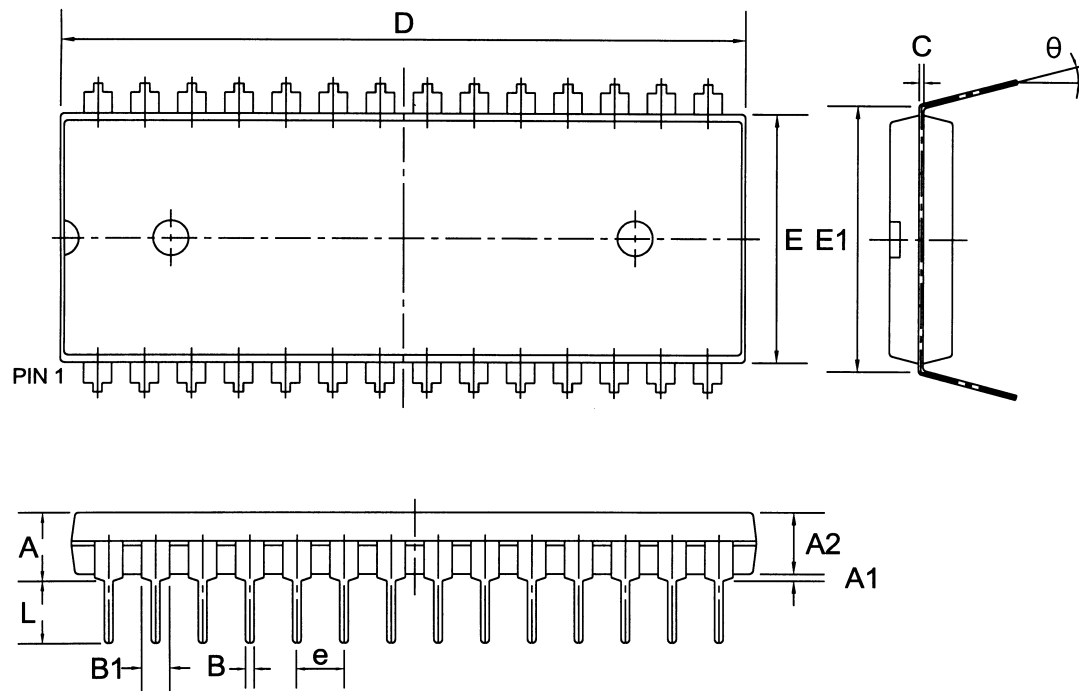
DIP-16 DIMENSION (FIG. NO. DIM-DIP16-0103-B)



| Symbol   | Dimensions In Millimeters |       |       | Dimensions In Inches |       |       |
|----------|---------------------------|-------|-------|----------------------|-------|-------|
|          | Min                       | Nom   | Max   | Min                  | Nom   | Max   |
| A        | —                         | —     | 4.31  | —                    | —     | 0.170 |
| A1       | 0.38                      | —     | —     | 0.015                | —     | —     |
| A2       | 3.15                      | 3.40  | 3.65  | 0.124                | 0.134 | 0.144 |
| B        | 0.38                      | 0.46  | 0.51  | 0.015                | 0.018 | 0.020 |
| B1       | 1.27                      | 1.52  | 1.77  | 0.050                | 0.060 | 0.070 |
| C        | 0.20                      | 0.25  | 0.30  | 0.008                | 0.010 | 0.012 |
| D        | 19.00                     | 19.30 | 19.60 | 0.748                | 0.760 | 0.772 |
| E        | 6.15                      | 6.40  | 6.65  | 0.242                | 0.252 | 0.262 |
| E1       | —                         | 7.62  | —     | —                    | 0.300 | —     |
| e        | —                         | 2.54  | —     | —                    | 0.100 | —     |
| L        | 3.00                      | 3.30  | 3.60  | 0.118                | 0.130 | 0.142 |
| $\theta$ | 0°                        | —     | 15°   | 0°                   | —     | 15°   |

# DIMENSION

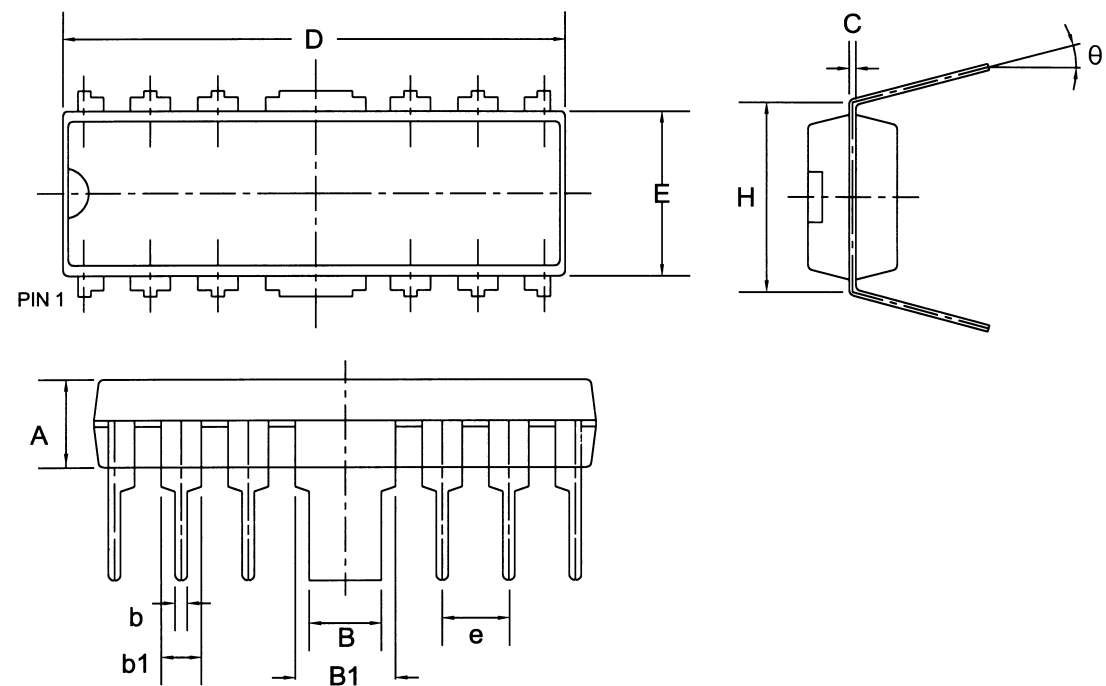
DIP-28 DIMENSION (FIG. NO. DIM-DIP28-0103-B)



| Symbol | Dimensions In Millimeters |       |       | Dimensions In Inches |       |       |
|--------|---------------------------|-------|-------|----------------------|-------|-------|
|        | Min                       | Nom   | Max   | Min                  | Nom   | Max   |
| A      | —                         | —     | 5.34  | —                    | —     | 0.210 |
| A1     | 0.38                      | —     | —     | 0.015                | —     | —     |
| A2     | 3.65                      | 3.85  | 4.05  | 0.144                | 0.152 | 0.159 |
| B      | —                         | 0.46  | —     | —                    | 0.018 | —     |
| B1     | —                         | 1.52  | —     | —                    | 0.060 | —     |
| C      | —                         | 0.25  | —     | —                    | 0.010 | —     |
| D      | 36.80                     | 37.10 | 37.40 | 1.449                | 1.461 | 1.472 |
| E      | 13.40                     | 13.70 | 14.00 | 0.528                | 0.539 | 0.551 |
| E1     | —                         | 15.24 | —     | —                    | 0.600 | —     |
| e      | —                         | 2.54  | —     | —                    | 0.100 | —     |
| L      | 3.00                      | 3.30  | 3.60  | 0.118                | 0.130 | 0.142 |
| θ      | 0°                        | —     | 15°   | 0°                   | —     | 15°   |

# DIMENSION

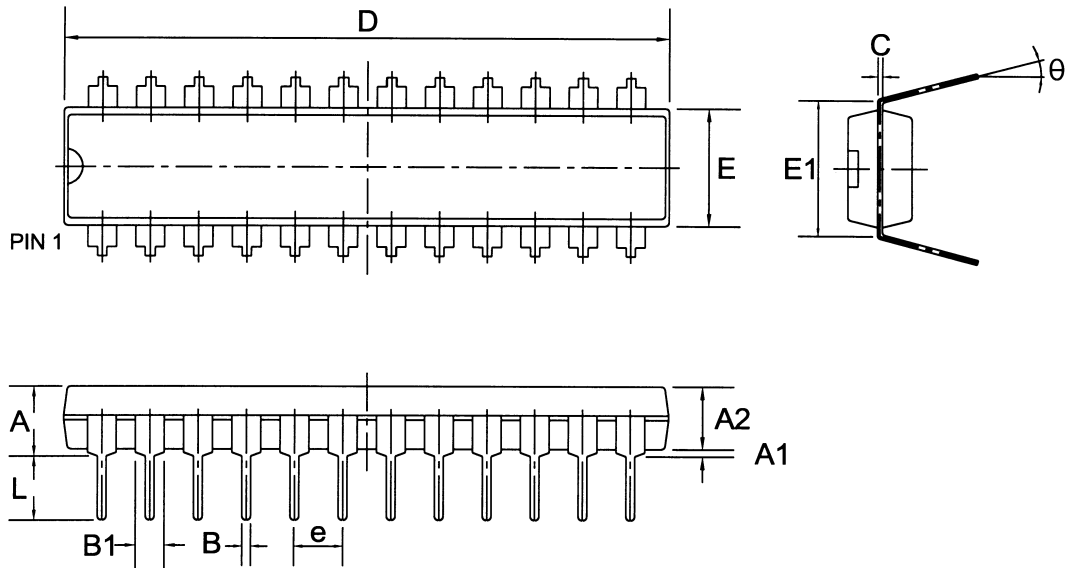
DIP-12H DIMENSION (FIG. NO. DIM-DIP12H-0103-B)



| Symbol   | Dimensions In Millimeters |       |       | Dimensions In Inches |       |       |
|----------|---------------------------|-------|-------|----------------------|-------|-------|
|          | Min                       | Nom   | Max   | Min                  | Nom   | Max   |
| A        | 3.15                      | 3.40  | 3.65  | 0.124                | 0.134 | 0.144 |
| B        | —                         | 3.00  | —     | —                    | 0.118 | —     |
| B1       | —                         | 4.06  | —     | —                    | 0.160 | —     |
| b        | —                         | 0.46  | —     | —                    | 0.018 | —     |
| b1       | —                         | 1.52  | —     | —                    | 0.060 | —     |
| C        | —                         | 0.25  | —     | —                    | 0.010 | —     |
| D        | 18.90                     | 19.00 | 19.10 | 0.744                | 0.748 | 0.752 |
| E        | 6.20                      | 6.30  | 6.40  | 0.244                | 0.248 | 0.252 |
| H        | 7.37                      | 7.62  | 7.87  | 0.290                | 0.300 | 0.310 |
| e        | —                         | 2.54  | —     | —                    | 0.100 | —     |
| $\theta$ | 0°                        | —     | 15°   | 0°                   | —     | 15°   |

# DIMENSION

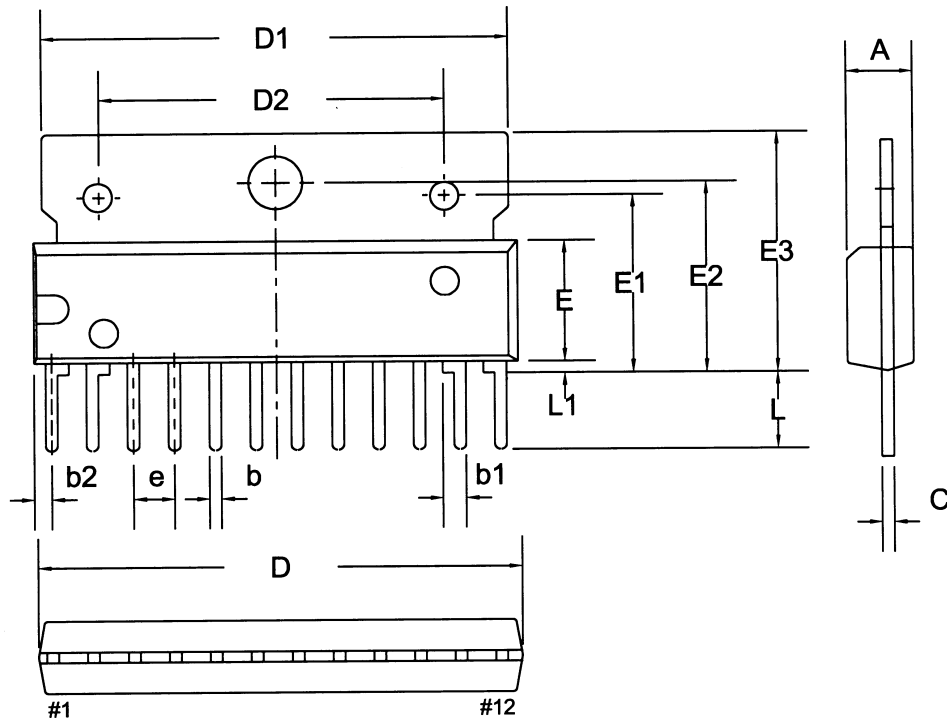
SDIP-24 DIMENSION (FIG. NO. DIM-SDIP24-0103-A)



| Symbol   | Dimensions In Millimeters |       |       | Dimensions In Inches |       |       |
|----------|---------------------------|-------|-------|----------------------|-------|-------|
|          | Min                       | Nom   | Max   | Min                  | Nom   | Max   |
| A        | —                         | —     | 4.31  | —                    | —     | 0.170 |
| A1       | 0.38                      | —     | —     | 0.015                | —     | —     |
| A2       | 3.15                      | 3.40  | 3.65  | 0.124                | 0.134 | 0.144 |
| B        | —                         | 0.43  | —     | —                    | 0.017 | —     |
| B1       | —                         | 1.05  | —     | —                    | 0.041 | —     |
| C        | —                         | 0.25  | —     | —                    | 0.010 | —     |
| D        | 22.82                     | 23.12 | 23.32 | 0.898                | 0.910 | 0.918 |
| E        | 6.15                      | 6.40  | 6.65  | 0.242                | 0.252 | 0.262 |
| E1       | —                         | 7.62  | —     | —                    | 0.300 | —     |
| e        | —                         | 1.78  | —     | —                    | 0.100 | —     |
| L        | 3.00                      | 3.30  | 3.60  | 0.118                | 0.130 | 0.142 |
| $\theta$ | 0°                        | —     | 15°   | 0°                   | —     | 15°   |

# DIMENSION

FSIP-12H DIMENSION (FIG. NO. DIM-FSIP12-0103-B)

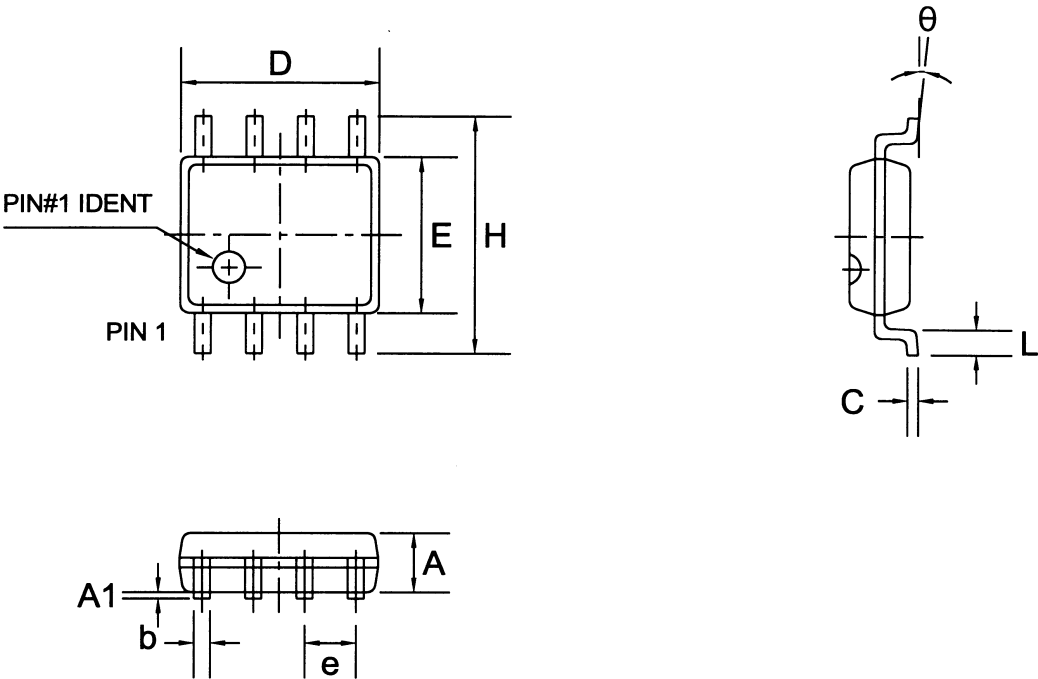


| Symbol | Dimensions In Millimeters |       |       | Dimensions In Inches |       |       |
|--------|---------------------------|-------|-------|----------------------|-------|-------|
|        | Min                       | Nom   | Max   | Min                  | Nom   | Max   |
| A      | 3.80                      | 4.00  | 4.20  | 0.150                | 0.157 | 0.165 |
| b      | 0.40                      | 0.50  | 0.60  | 0.016                | 0.020 | 0.024 |
| b1     | 0.85                      | 0.95  | 1.05  | 0.033                | 0.037 | 0.041 |
| b2     | —                         | 0.83  | —     | —                    | 0.033 | —     |
| C      | 0.35                      | 0.40  | 0.50  | 0.014                | 0.016 | 0.020 |
| D      | 29.40                     | 29.60 | 29.80 | 1.157                | 1.165 | 1.173 |
| D1     | 27.80                     | 28.00 | 28.20 | 1.094                | 1.102 | 1.110 |
| D2     | 21.80                     | 22.00 | 22.20 | 0.858                | 0.866 | 0.874 |
| E      | 7.80                      | 8.00  | 8.20  | 0.307                | 0.315 | 0.323 |
| E1     | 11.30                     | 11.50 | 11.70 | 0.445                | 0.453 | 0.461 |
| E2     | 12.30                     | 12.50 | 12.70 | 0.484                | 0.492 | 0.500 |
| E3     | —                         | —     | 15.20 | —                    | —     | 0.598 |
| e      | —                         | 2.54  | —     | —                    | 0.100 | —     |
| L      | 5.20                      | 5.50  | 5.80  | 0.205                | 0.217 | 0.228 |
| L1     | 0.30                      | 0.50  | 0.70  | 0.012                | 0.020 | 0.028 |

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# DIMENSION

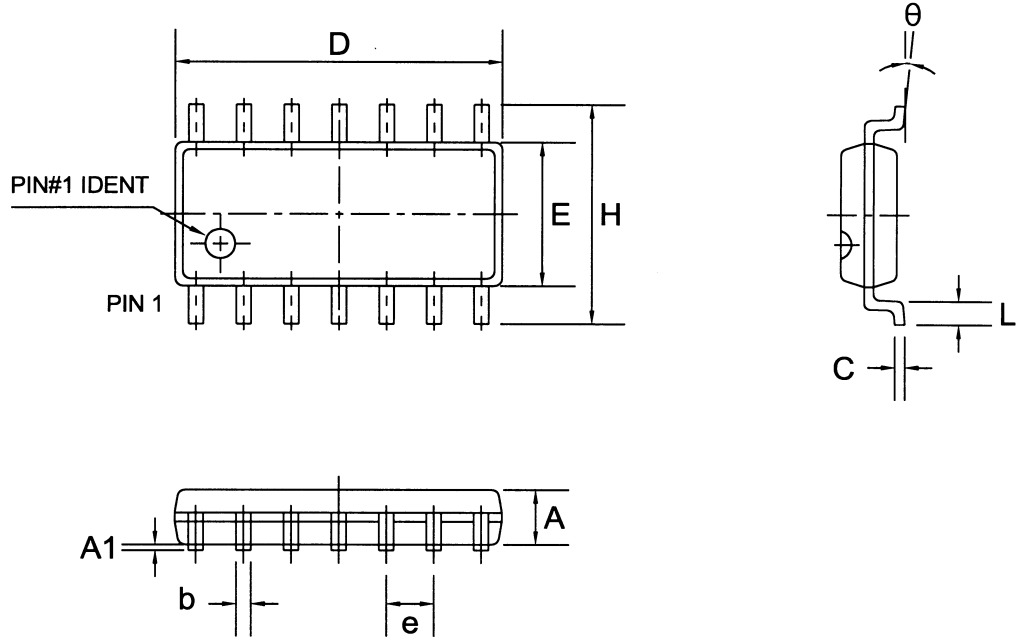
SOP-8 DIMENSION (FIG. NO. DIM-SOP8-0103-B)



| Symbol   | Dimensions In Millimeters |      |      | Dimensions In Inches |       |       |
|----------|---------------------------|------|------|----------------------|-------|-------|
|          | Min                       | Nom  | Max  | Min                  | Nom   | Max   |
| A        | 1.30                      | 1.50 | 1.70 | 0.051                | 0.059 | 0.067 |
| A1       | 0.06                      | 0.16 | 0.26 | 0.002                | 0.006 | 0.010 |
| b        | 0.30                      | 0.40 | 0.55 | 0.012                | 0.016 | 0.022 |
| C        | 0.15                      | 0.25 | 0.35 | 0.006                | 0.010 | 0.014 |
| D        | 4.72                      | 4.92 | 5.12 | 0.186                | 0.194 | 0.202 |
| E        | 3.75                      | 3.95 | 4.15 | 0.148                | 0.156 | 0.163 |
| e        | —                         | 1.27 | —    | —                    | 0.050 | —     |
| H        | 5.70                      | 6.00 | 6.30 | 0.224                | 0.236 | 0.248 |
| L        | 0.45                      | 0.65 | 0.85 | 0.018                | 0.026 | 0.033 |
| $\theta$ | 0°                        | —    | 8°   | 0°                   | —     | 8°    |

# DIMENSION

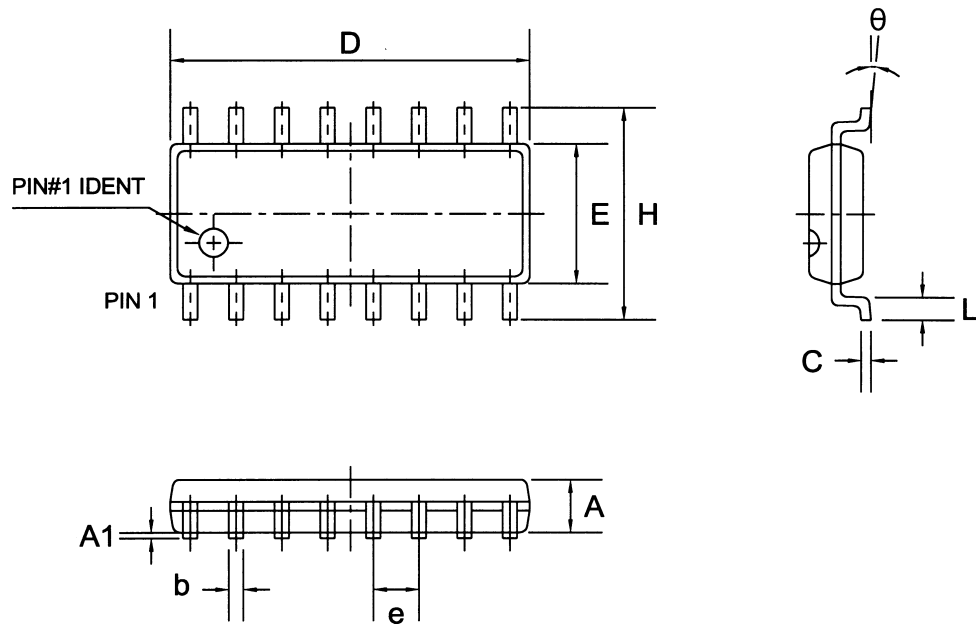
SOP-14 DIMENSION (FIG. NO. DIM-SOP14-0103-B)



| Symbol | Dimensions In Millimeters |      |      | Dimensions In Inches |       |       |
|--------|---------------------------|------|------|----------------------|-------|-------|
|        | Min                       | Nom  | Max  | Min                  | Nom   | Max   |
| A      | 1.30                      | 1.50 | 1.70 | 0.051                | 0.059 | 0.067 |
| A1     | 0.08                      | 0.16 | 0.24 | 0.003                | 0.006 | 0.009 |
| b      | —                         | 0.40 | —    | —                    | 0.016 | —     |
| C      | —                         | 0.25 | —    | —                    | 0.010 | —     |
| D      | 8.25                      | 8.55 | 8.85 | 0.325                | 0.337 | 0.348 |
| E      | 3.75                      | 3.95 | 4.15 | 0.148                | 0.156 | 0.163 |
| e      | —                         | 1.27 | —    | —                    | 0.050 | —     |
| H      | 5.70                      | 6.00 | 6.30 | 0.224                | 0.236 | 0.248 |
| L      | 0.45                      | 0.65 | 0.85 | 0.018                | 0.026 | 0.033 |
| θ      | 0°                        | —    | 8°   | 0°                   | —     | 8°    |

# DIMENSION

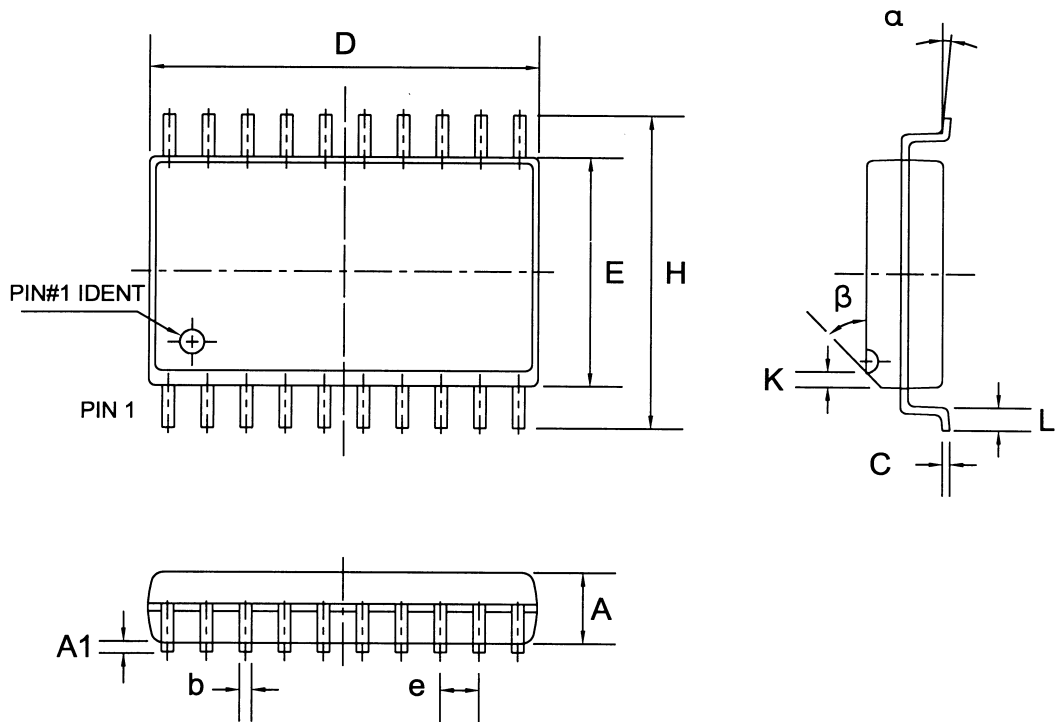
SOP-16 DIMENSION (FIG. NO. DIM-SOP16-0103-B)



| Symbol | Dimensions In Millimeters |       |       | Dimensions In Inches |       |       |
|--------|---------------------------|-------|-------|----------------------|-------|-------|
|        | Min                       | Nom   | Max   | Min                  | Nom   | Max   |
| A      | 1.30                      | 1.50  | 1.70  | 0.051                | 0.059 | 0.067 |
| A1     | 0.06                      | 0.16  | 0.26  | 0.002                | 0.006 | 0.010 |
| b      | 0.30                      | 0.40  | 0.55  | 0.012                | 0.016 | 0.022 |
| C      | 0.15                      | 0.25  | 0.35  | 0.006                | 0.010 | 0.014 |
| D      | 9.70                      | 10.00 | 10.30 | 0.382                | 0.394 | 0.406 |
| E      | 3.75                      | 3.95  | 4.15  | 0.148                | 0.156 | 0.163 |
| e      | —                         | 1.27  | —     | —                    | 0.050 | —     |
| H      | 5.70                      | 6.00  | 6.30  | 0.224                | 0.236 | 0.248 |
| L      | 0.45                      | 0.65  | 0.85  | 0.018                | 0.026 | 0.033 |
| θ      | 0°                        | —     | 8°    | 0°                   | —     | 8°    |

# DIMENSION

SOP-20 DIMENSION (FIG. NO. DIM-SOP20-0103-A)

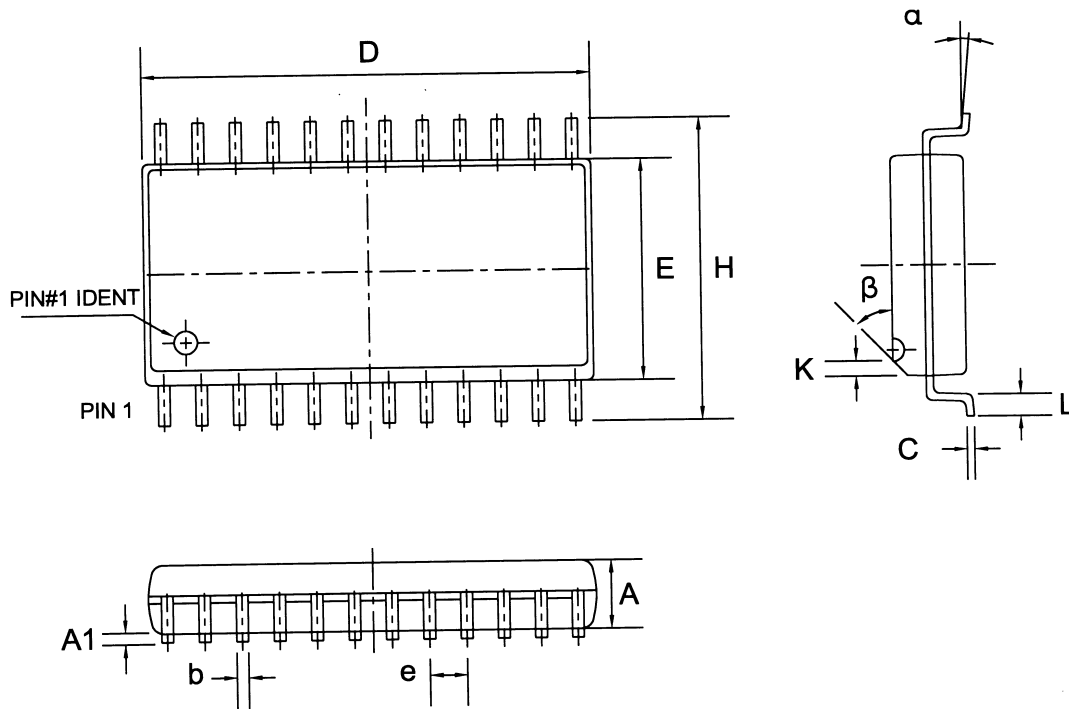


| Symbol   | Dimensions In Millimeters |       |       | Dimensions In Inches |       |       |
|----------|---------------------------|-------|-------|----------------------|-------|-------|
|          | Min                       | Nom   | Max   | Min                  | Nom   | Max   |
| A        | 2.15                      | 2.35  | 2.55  | 0.085                | 0.093 | 0.100 |
| A1       | 0.05                      | 0.15  | 0.25  | 0.002                | 0.006 | 0.010 |
| b        | —                         | 0.40  | —     | —                    | 0.016 | —     |
| C        | —                         | 0.25  | —     | —                    | 0.010 | —     |
| D        | 12.40                     | 12.70 | 13.00 | 0.488                | 0.500 | 0.512 |
| E        | 7.40                      | 7.65  | 7.90  | 0.291                | 0.301 | 0.311 |
| e        | —                         | 1.27  | —     | —                    | 0.050 | —     |
| H        | 10.15                     | 10.45 | 10.75 | 0.400                | 0.411 | 0.423 |
| K        | —                         | 0.50  | —     | —                    | 0.020 | —     |
| L        | 0.60                      | 0.80  | 1.00  | 0.024                | 0.031 | 0.039 |
| $\alpha$ | 0°                        | —     | 8°    | 0°                   | —     | 8°    |
| $\beta$  | —                         | 45°   | —     | —                    | 45°   | —     |

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# DIMENSION

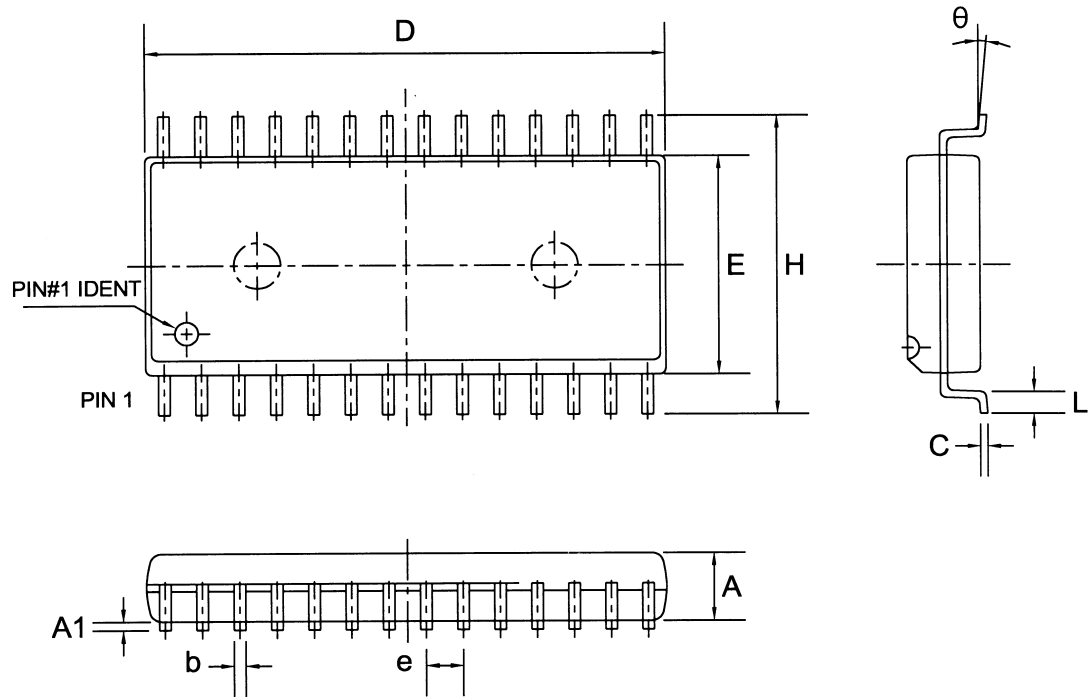
SOP-24 DIMENSION (FIG. NO. DIM-SOP24-0103-A)



| Symbol   | Dimensions In Millimeters |       |       | Dimensions In Inches |       |       |
|----------|---------------------------|-------|-------|----------------------|-------|-------|
|          | Min                       | Nom   | Max   | Min                  | Nom   | Max   |
| A        | 2.35                      | 2.50  | 2.65  | 0.093                | 0.098 | 0.104 |
| A1       | 0.10                      | 0.20  | 0.30  | 0.004                | 0.008 | 0.012 |
| b        | —                         | 0.40  | —     | —                    | 0.016 | —     |
| C        | —                         | 0.25  | —     | —                    | 0.010 | —     |
| D        | 15.10                     | 15.40 | 15.70 | 0.594                | 0.606 | 0.618 |
| E        | 7.35                      | 7.50  | 7.65  | 0.289                | 0.295 | 0.301 |
| e        | —                         | 1.27  | —     | —                    | 0.050 | —     |
| H        | 10.15                     | 10.45 | 10.75 | 0.400                | 0.411 | 0.423 |
| K        | —                         | 0.50  | —     | —                    | 0.020 | —     |
| L        | 0.60                      | 0.80  | 1.00  | 0.024                | 0.031 | 0.039 |
| $\alpha$ | 0°                        | —     | 8°    | 0°                   | —     | 8°    |
| $\beta$  | —                         | 45°   | —     | —                    | 45°   | —     |

# DIMENSION

SOP-28 DIMENSION (FIG. NO. DIM-SOP28-0103-B)

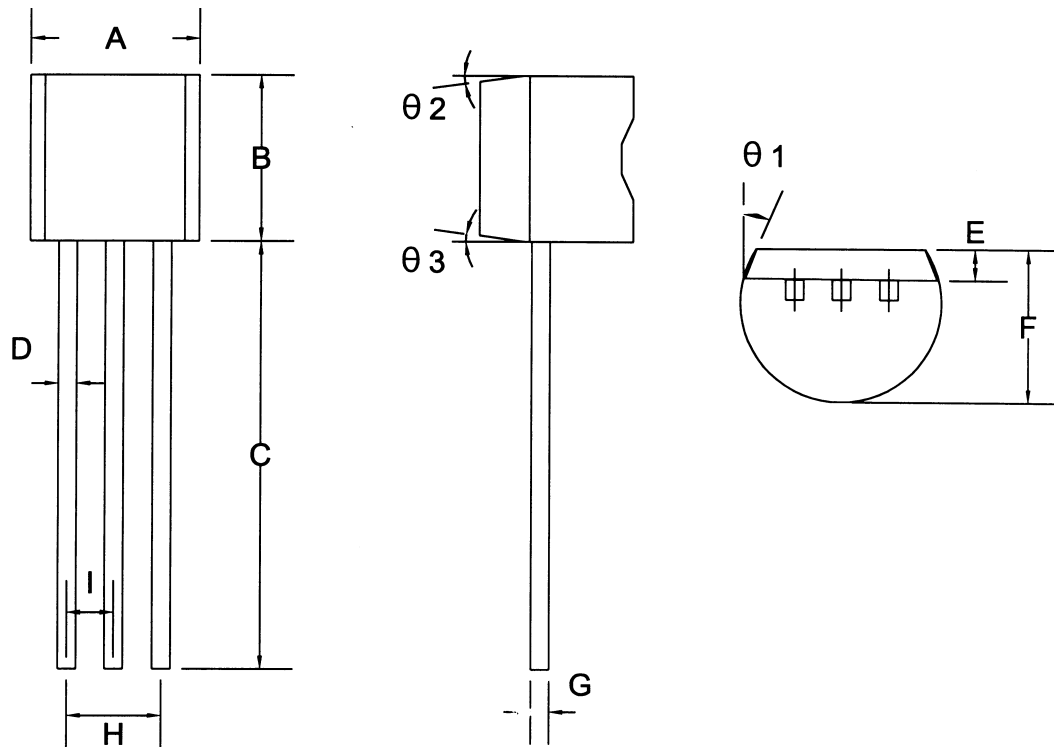


| Symbol | Dimensions In Millimeters |       |       | Dimensions In Inches |       |       |
|--------|---------------------------|-------|-------|----------------------|-------|-------|
|        | Min                       | Nom   | Max   | Min                  | Nom   | Max   |
| A      | 2.15                      | 2.35  | 2.55  | 0.085                | 0.093 | 0.100 |
| A1     | 0.05                      | 0.15  | 0.25  | 0.002                | 0.006 | 0.010 |
| b      | —                         | 0.40  | —     | —                    | 0.016 | —     |
| C      | —                         | 0.25  | —     | —                    | 0.010 | —     |
| D      | 17.40                     | 17.70 | 18.00 | 0.685                | 0.697 | 0.709 |
| E      | 7.40                      | 7.65  | 7.90  | 0.291                | 0.301 | 0.311 |
| e      | —                         | 1.27  | —     | —                    | 0.050 | —     |
| H      | 10.15                     | 10.45 | 10.75 | 0.400                | 0.411 | 0.423 |
| L      | 0.60                      | 0.80  | 1.00  | 0.024                | 0.031 | 0.039 |
| θ      | 0°                        | —     | 8°    | 0°                   | —     | 8°    |

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# DIMENSION

TO-92 DIMENSION (FIG. NO. DIM-TO92-0104-B)

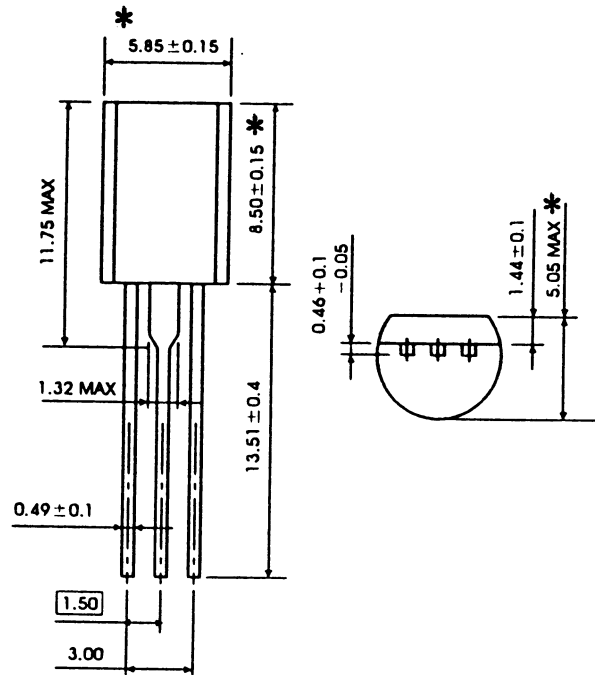


| Symbol     | Dimensions In Millimeters |       |       | Dimensions In Inches |       |       |
|------------|---------------------------|-------|-------|----------------------|-------|-------|
|            | Min                       | Nom   | Max   | Min                  | Nom   | Max   |
| A          | 4.33                      | 4.58  | 4.83  | 0.170                | 0.180 | 0.190 |
| B          | 4.33                      | 4.58  | 4.83  | 0.170                | 0.180 | 0.190 |
| C          | 14.07                     | 14.47 | 14.87 | 0.554                | 0.570 | 0.585 |
| D          | 0.34                      | 0.44  | 0.54  | 0.013                | 0.017 | 0.021 |
| E          | 0.92                      | 1.02  | 1.12  | 0.036                | 0.040 | 0.044 |
| F          | 3.36                      | 3.56  | 3.76  | 0.132                | 0.140 | 0.148 |
| G          | 0.34                      | 0.44  | 0.54  | 0.013                | 0.017 | 0.021 |
| H          | 2.42                      | 2.54  | 2.66  | 0.095                | 0.100 | 0.105 |
| I          | 1.15                      | 1.27  | 1.39  | 0.045                | 0.050 | 0.055 |
| $\theta 1$ | —                         | 5°    | —     | —                    | 5°    | —     |
| $\theta 2$ | —                         | 2°    | —     | —                    | 2°    | —     |
| $\theta 3$ | —                         | 2°    | —     | —                    | 2°    | —     |

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# DIMENSION

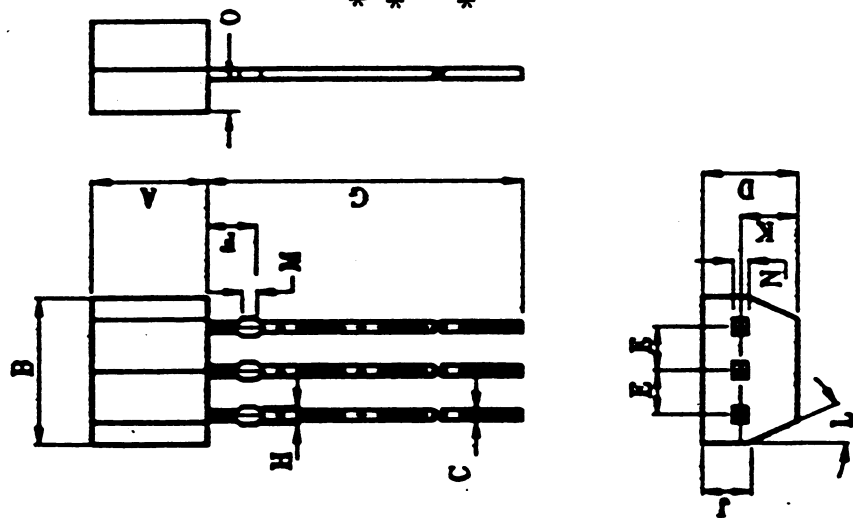
TO-92L DIMENSION (FIG. NO. DIM-TO92L-0002-A)



unit:mm

# DIMENSION

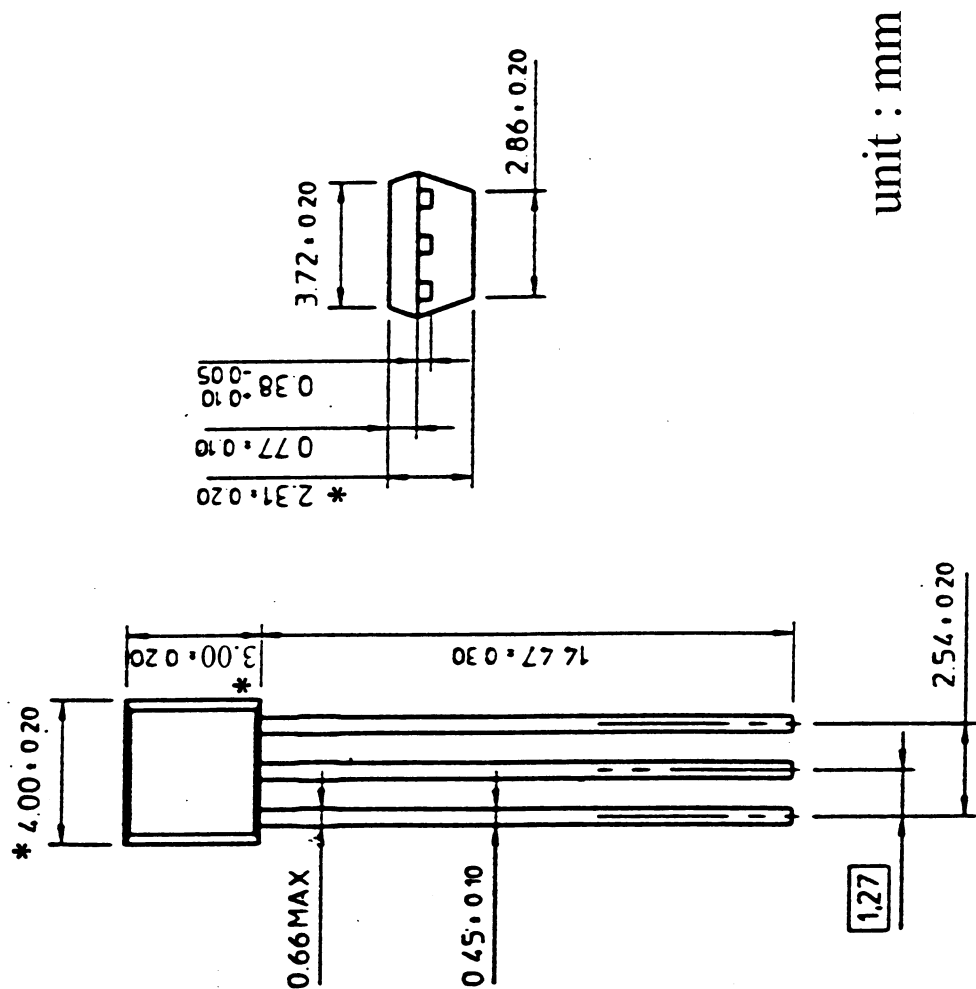
TO-92M DIMENSION (FIG. NO. DIM-TO92M-0002-A)



unit : mm

DIMENSION

TO-92SP DIMENSION (FIG. NO. DIM-TO92SP-0011-B)

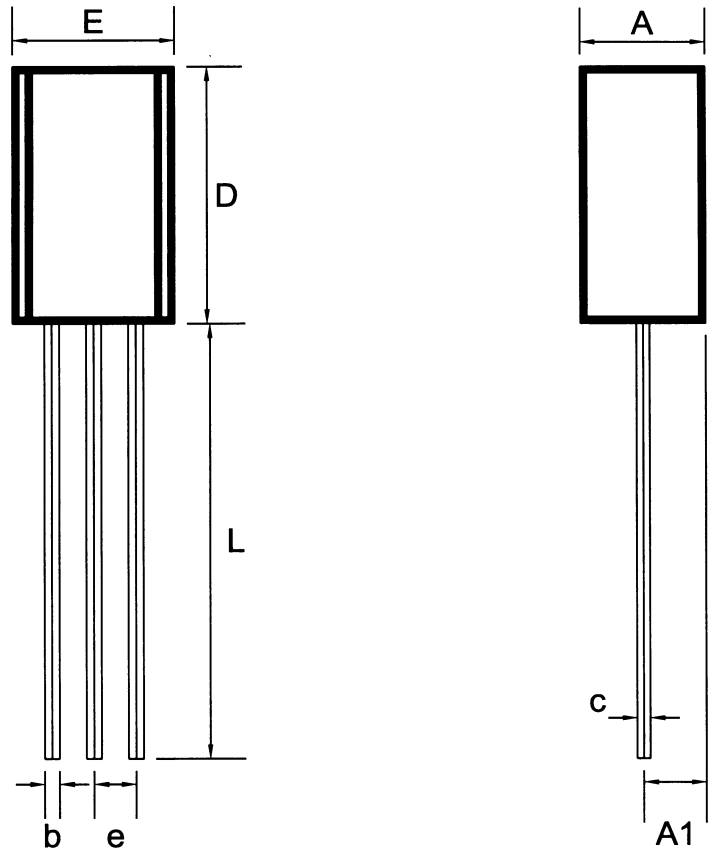


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# DIMENSION

TO-92NL DIMENSION (FIG. NO. DIM-TO92NL-0103-B)

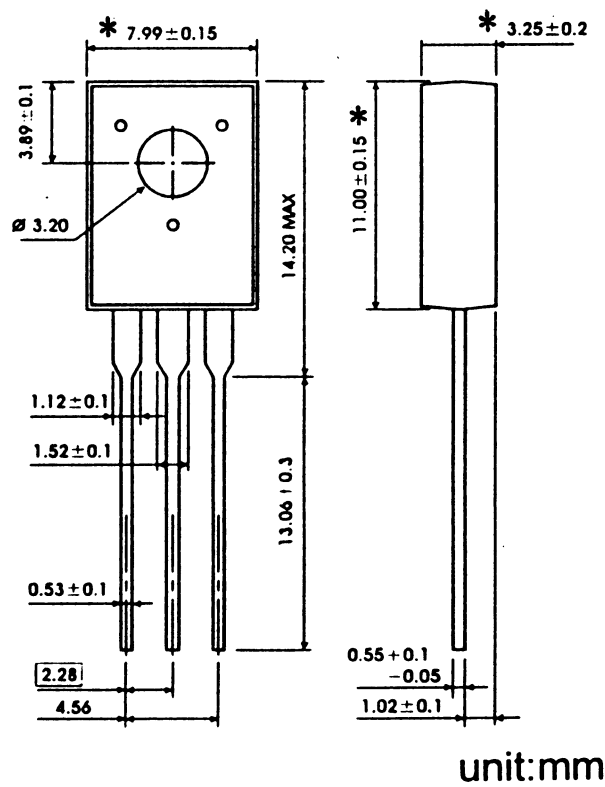


| Symbol | Dimensions In Millimeters |       |       | Dimensions In Inches |       |       |
|--------|---------------------------|-------|-------|----------------------|-------|-------|
|        | Min                       | Nom   | Max   | Min                  | Nom   | Max   |
| A      | 3.60                      | 3.80  | 4.00  | 0.142                | 0.150 | 0.157 |
| A1     | 1.30                      | 1.40  | 1.50  | 0.051                | 0.055 | 0.059 |
| b      | —                         | 0.45  | —     | —                    | 0.018 | —     |
| c      | —                         | 0.40  | —     | —                    | 0.016 | —     |
| D      | 7.85                      | 8.00  | 8.15  | 0.309                | 0.315 | 0.321 |
| E      | 4.75                      | 4.90  | 5.05  | 0.187                | 0.193 | 0.199 |
| e      | —                         | 1.27  | —     | —                    | 0.050 | —     |
| L      | 13.10                     | 13.50 | 13.90 | 0.516                | 0.531 | 0.547 |

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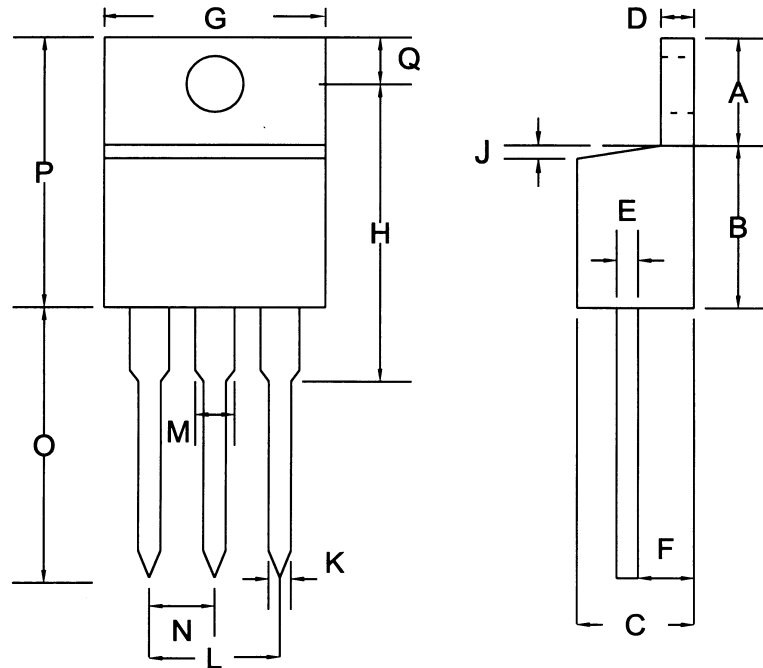
# DIMENSION

TO-126 DIMENSION (FIG. NO. DIM-TO126-0002-A)



# DIMENSION

TO-220 DIMENSION (FIG. NO. DIM-TO220-0104-B)

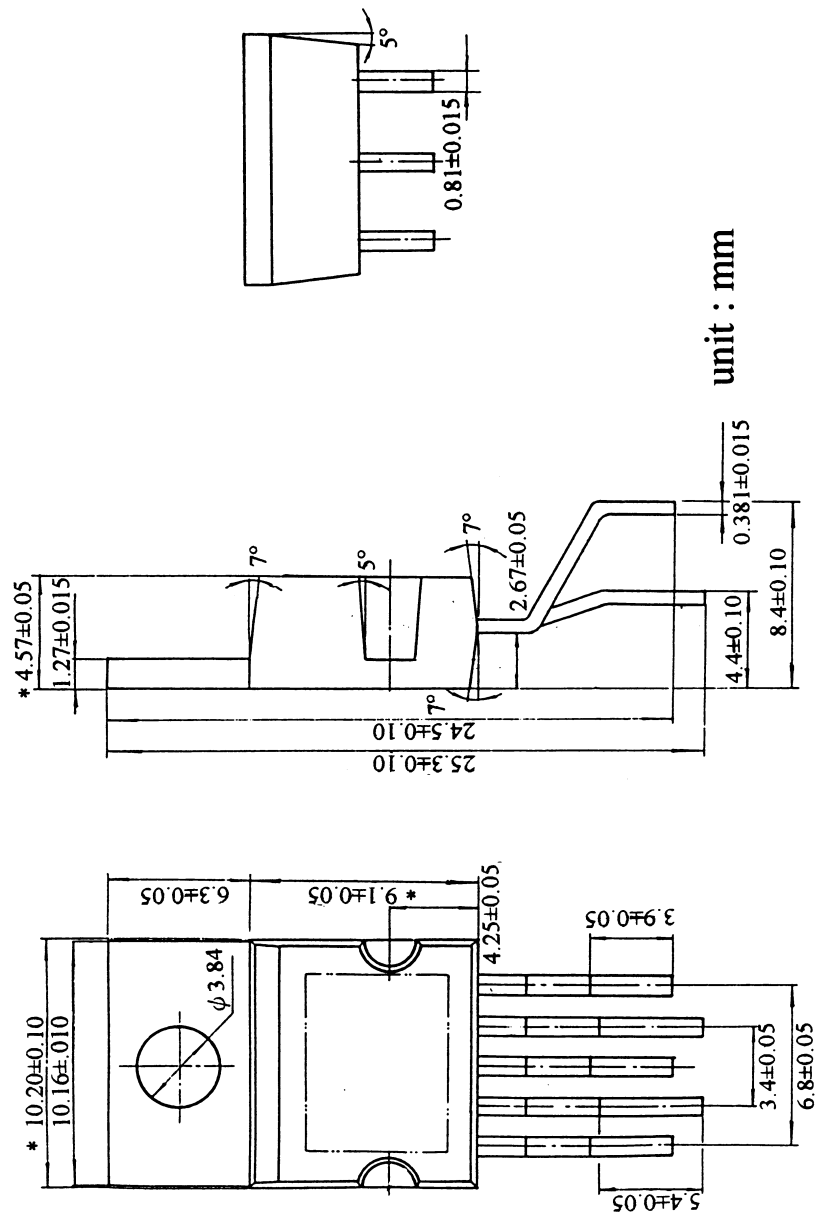


| Symbol | Dimensions In Millimeters |       |       | Dimensions In Inches |       |       |
|--------|---------------------------|-------|-------|----------------------|-------|-------|
|        | Min                       | Nom   | Max   | Min                  | Nom   | Max   |
| A      | 5.58                      | 6.54  | 7.49  | 0.220                | 0.257 | 0.295 |
| B      | 8.38                      | 8.64  | 8.90  | 0.330                | 0.340 | 0.350 |
| C      | 4.07                      | 4.45  | 4.82  | 0.160                | 0.175 | 0.190 |
| D      | 1.15                      | 1.27  | 1.39  | 0.045                | 0.050 | 0.055 |
| E      | 0.35                      | 0.45  | 0.60  | 0.014                | 0.018 | 0.024 |
| F      | 2.04                      | 2.42  | 2.79  | 0.080                | 0.095 | 0.110 |
| G      | 9.66                      | 9.97  | 10.28 | 0.380                | 0.393 | 0.405 |
| H      | —                         | 16.25 | —     | —                    | 0.640 | —     |
| I      | 3.68                      | 3.83  | 3.98  | 0.145                | 0.151 | 0.157 |
| J      | —                         | —     | 1.27  | —                    | —     | 0.050 |
| K      | 0.75                      | 0.85  | 0.95  | 0.030                | 0.033 | 0.037 |
| L      | 4.83                      | 5.08  | 5.33  | 0.190                | 0.200 | 0.210 |
| M      | 1.15                      | 1.33  | 1.52  | 0.045                | 0.052 | 0.060 |
| N      | 2.42                      | 2.54  | 2.66  | 0.095                | 0.100 | 0.105 |
| O      | 12.70                     | 13.48 | 14.27 | 0.500                | 0.531 | 0.562 |
| P      | 14.48                     | 15.17 | 15.87 | 0.570                | 0.597 | 0.625 |
| Q      | 2.54                      | 2.79  | 3.04  | 0.100                | 0.110 | 0.120 |

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# DIMENSION

TO-220B DIMENSION (FIG. NO. DIM-TO220B-0002-A)

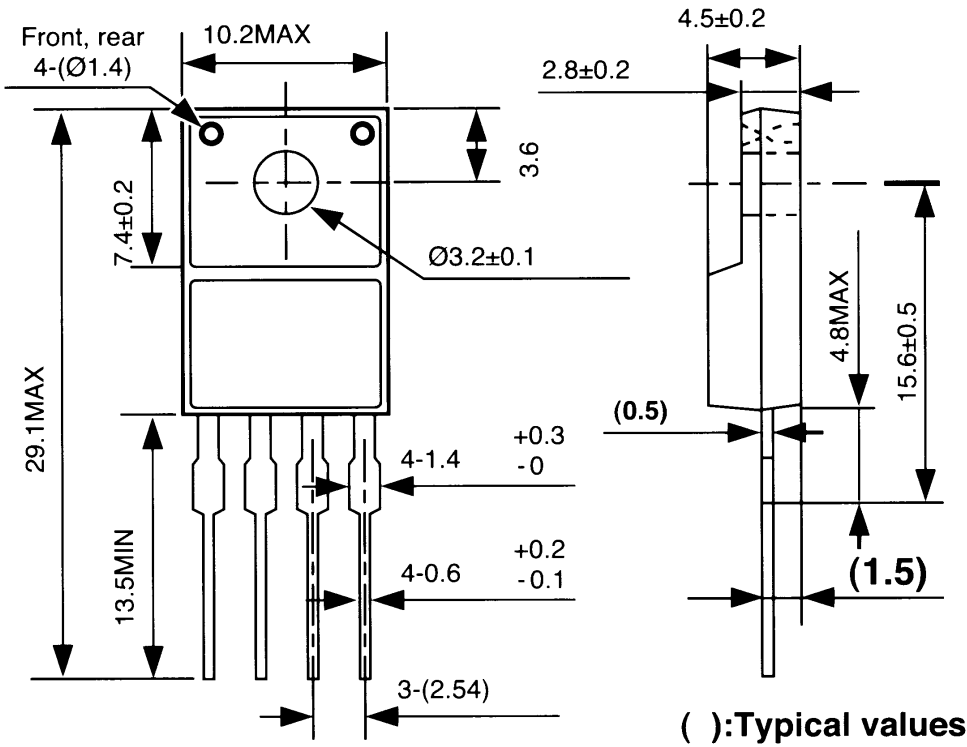


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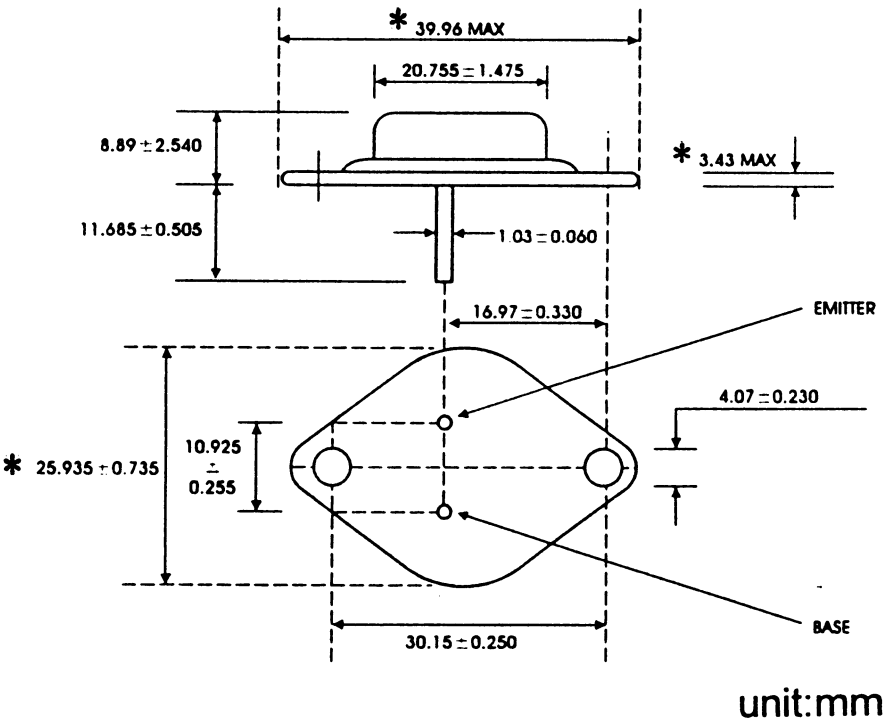
# DIMENSION

TO-220FP-4 DIMENSION (FIG. NO. DIM-TO220FP-0100-A)



# DIMENSION

TO-3 DIMENSION (FIG. NO. DIM-TO3-0002-A)

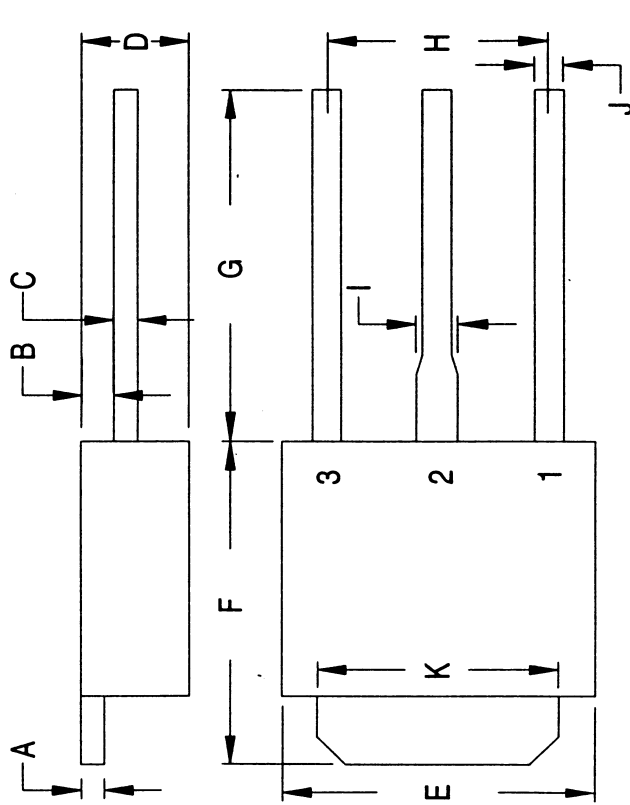


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# DIMENSION

TO-251 DIMENSION (FIG. NO. DIM-TO251-0002-A)



unit : mm

| DIM | MIN. | MAX. |
|-----|------|------|
| G   | 6.5  | -    |
| H   | -    | 4.6  |
| I   | -    | 0.9  |
| J   | -    | 0.8  |
| K   | 5.2  | 5.5  |

| DIM | MIN. | MAX. |
|-----|------|------|
| A   | 0.45 | 0.55 |
| B   | 0.9  | 1.5  |
| C   | 0.45 | 0.6  |
| D   | 2.2  | 2.4  |
| E   | 6.4  | 6.8  |
| F   | 6.8  | 7.2  |

\*

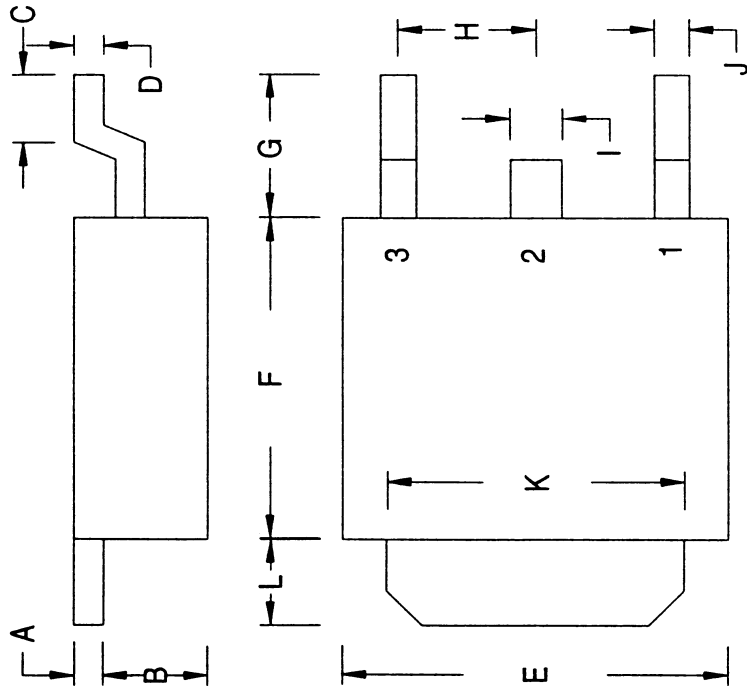
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# DIMENSION

TO-252 DIMENSION (FIG. NO. DIM-TO252-0009-B)



unit : mm

| DIM | MIN  | MAX  |
|-----|------|------|
| A   | 0.45 | 0.55 |
| B   | 1.65 | 1.95 |
| C   | 0.90 | 1.50 |
| D   | 0.45 | 0.60 |
| E   | 6.40 | 6.80 |
| F   | 5.20 | 5.60 |
| G   | 2.20 | 2.80 |
| H   | —    | 2.30 |
| I   | —    | 0.90 |
| J   | —    | 0.80 |
| K   | 5.20 | 5.50 |
| L   | 1.40 | 1.60 |

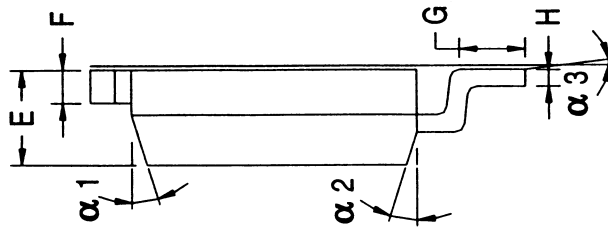
\*

\*

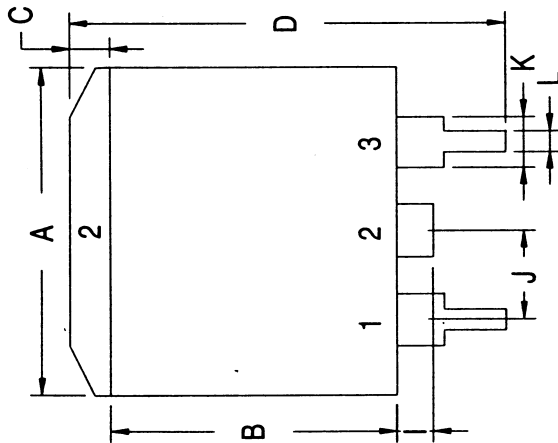
\*

# DIMENSION

TO-263 DIMENSION (FIG. NO. DIM-TO263-0002-A)



unit : mm



| DIM        | MIN. | MAX. |
|------------|------|------|
| I          | 1.27 | 1.78 |
| J          | -    | 2.54 |
| K          | 1.14 | 1.4  |
| L          | 0.51 | 0.99 |
| $\alpha 1$ | 6°   | 8°   |
| $\alpha 2$ | 6°   | 8°   |
| $\alpha 3$ | 0°   | 5°   |

| DIM | MIN.  | MAX.  |
|-----|-------|-------|
| A   | 9.65  | 10.29 |
| B   | 8.38  | 9.4   |
| C   | -     | 1.4   |
| D   | 14.61 | 15.88 |
| E   | 4.06  | 4.83  |
| F   | 1.14  | 1.4   |
| G   | 2.29  | 2.79  |
| H   | 0.46  | 0.74  |

\*

\*

\*

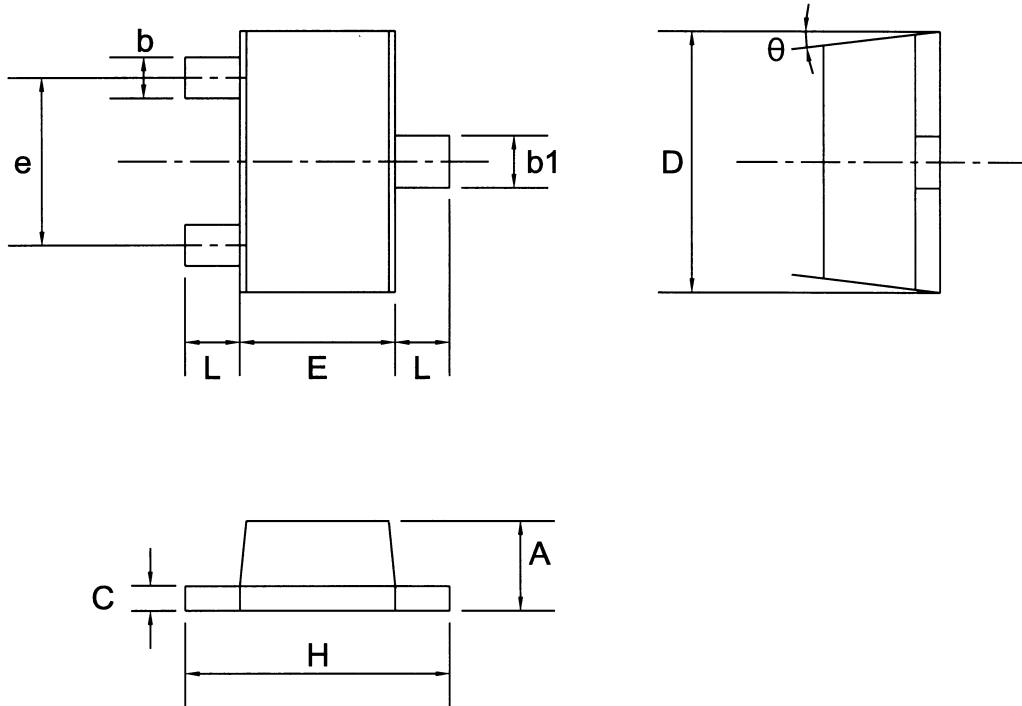
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# DIMENSION

SOT-113 DIMENSION (FIG. NO. DIM-SOT113-0103-B)

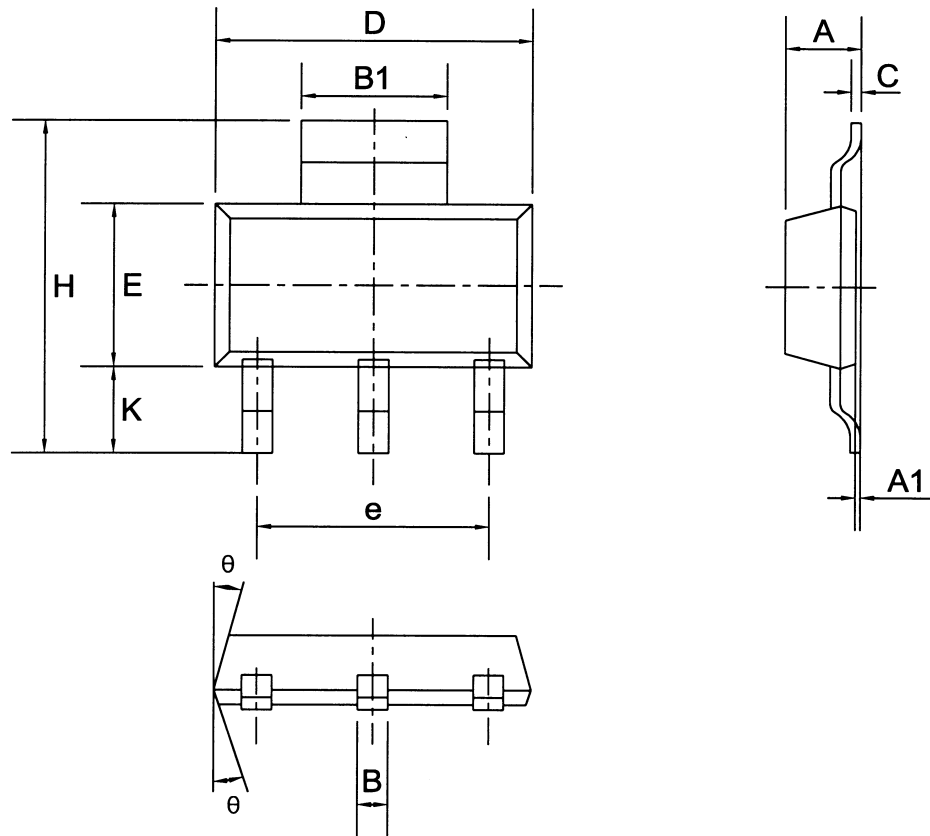


| Symbol   | Dimensions In Millimeters |       |       | Dimensions In Inches |       |       |
|----------|---------------------------|-------|-------|----------------------|-------|-------|
|          | Min                       | Nom   | Max   | Min                  | Nom   | Max   |
| A        | 0.56                      | 0.61  | 0.66  | 0.022                | 0.024 | 0.026 |
| b        | 0.19                      | 0.22  | 0.25  | 0.007                | 0.009 | 0.010 |
| b1       | 0.25                      | 0.28  | 0.31  | 0.010                | 0.011 | 0.012 |
| C        | 0.10                      | 0.13  | 0.16  | 0.004                | 0.005 | 0.006 |
| D        | 1.35                      | 1.40  | 1.45  | 0.053                | 0.055 | 0.057 |
| E        | 0.76                      | 0.81  | 0.86  | 0.030                | 0.032 | 0.034 |
| e        | —                         | 0.90  | —     | —                    | 0.035 | —     |
| H        | 1.33                      | 1.38  | 1.43  | 0.052                | 0.054 | 0.056 |
| L        | 0.235                     | 0.285 | 0.335 | 0.009                | 0.011 | 0.013 |
| $\theta$ | 0°                        | —     | 7°    | 0°                   | —     | 7°    |

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# DIMENSION

SOT-223 DIMENSION (FIG. NO. DIM-SOT223-0103-B)

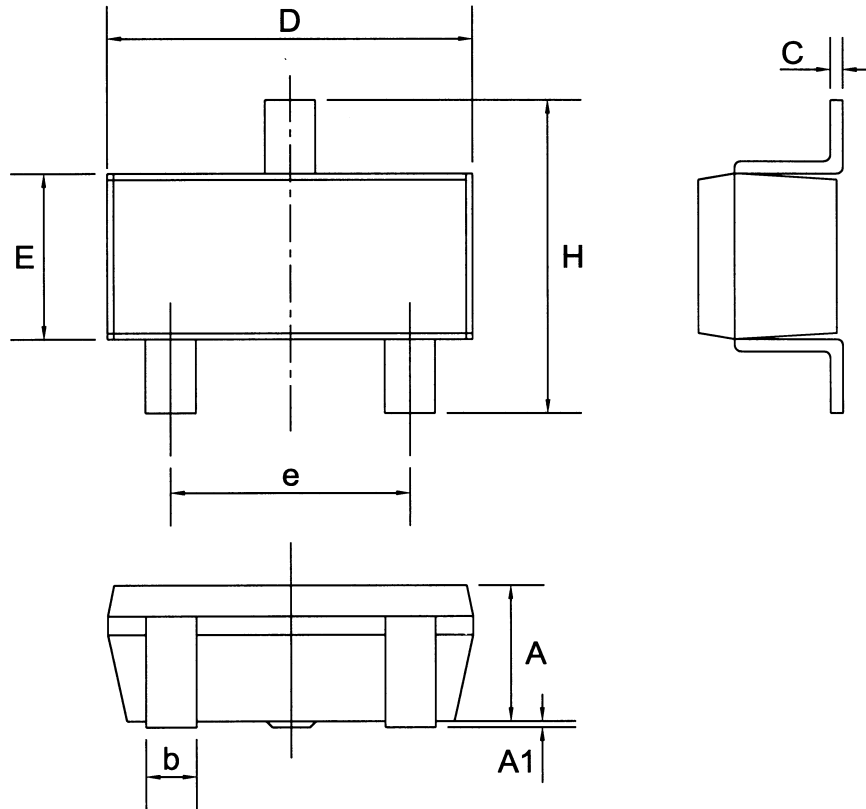


| Symbol | Dimensions In Millimeters |      |      | Dimensions In Inches |       |       |
|--------|---------------------------|------|------|----------------------|-------|-------|
|        | Min                       | Nom  | Max  | Min                  | Nom   | Max   |
| A      | 1.50                      | 1.65 | 1.80 | 0.059                | 0.065 | 0.071 |
| A1     | 0.02                      | 0.05 | 0.08 | 0.001                | 0.002 | 0.003 |
| B      | 0.60                      | 0.70 | 0.80 | 0.024                | 0.028 | 0.031 |
| B1     | 2.90                      | 3.00 | 3.15 | 0.114                | 0.118 | 0.124 |
| C      | 0.28                      | 0.30 | 0.32 | 0.011                | 0.012 | 0.013 |
| D      | 6.30                      | 6.50 | 6.70 | 0.248                | 0.256 | 0.264 |
| E      | 3.30                      | 3.50 | 3.70 | 0.130                | 0.138 | 0.146 |
| e      | —                         | 4.60 | —    | —                    | 0.181 | —     |
| H      | 6.70                      | 7.00 | 7.30 | 0.264                | 0.276 | 0.287 |
| K      | 1.50                      | 1.75 | 2.00 | 0.059                | 0.069 | 0.079 |
| θ      | 0°                        | —    | 13°  | 0°                   | —     | 13°   |

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# DIMENSION

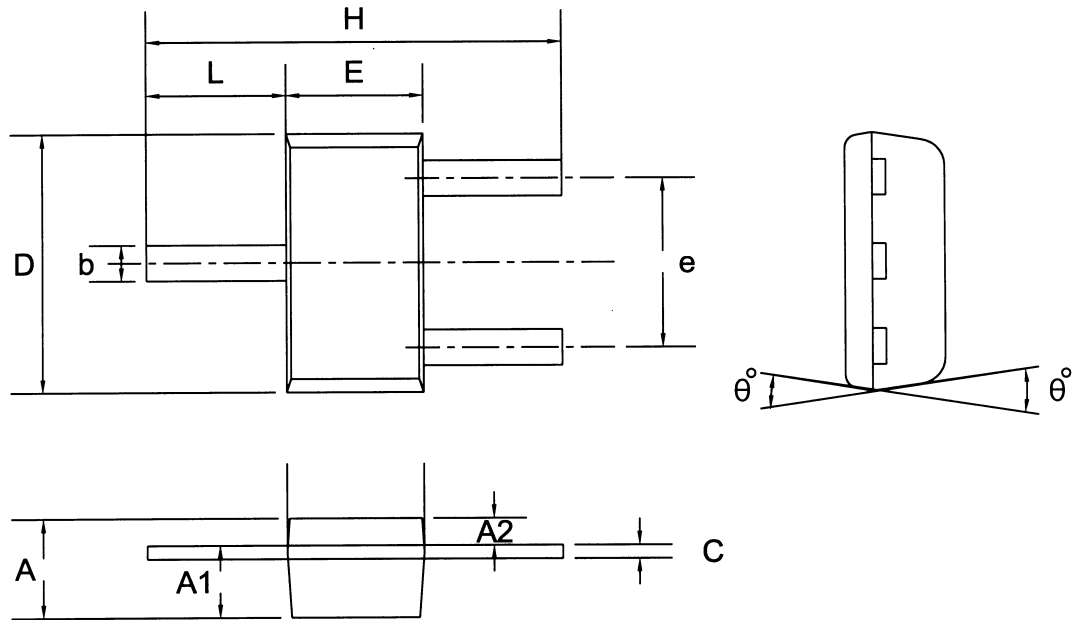
SOT-23 DIMENSION (FIG. NO. DIM-SOT23-0103-B)



| Symbol | Dimensions In Millimeters |      |      | Dimensions In Inches |       |       |
|--------|---------------------------|------|------|----------------------|-------|-------|
|        | Min                       | Nom  | Max  | Min                  | Nom   | Max   |
| A      | 1.05                      | 1.15 | 1.35 | 0.041                | 0.045 | 0.053 |
| A1     | —                         | 0.05 | 0.10 | —                    | 0.002 | 0.004 |
| b      | 0.35                      | 0.40 | 0.55 | 0.014                | 0.016 | 0.022 |
| C      | 0.08                      | 0.10 | 0.20 | 0.003                | 0.004 | 0.008 |
| D      | 2.70                      | 2.90 | 3.10 | 0.106                | 0.114 | 0.122 |
| E      | 1.20                      | 1.35 | 1.50 | 0.047                | 0.053 | 0.059 |
| e      | 1.70                      | 1.90 | 2.10 | 0.067                | 0.075 | 0.083 |
| H      | 2.35                      | 2.55 | 2.75 | 0.093                | 0.100 | 0.108 |

# DIMENSION

SOT-23 VERTICAL DIMENSION (FIG. NO. DIM-SOT23V-0103-B)



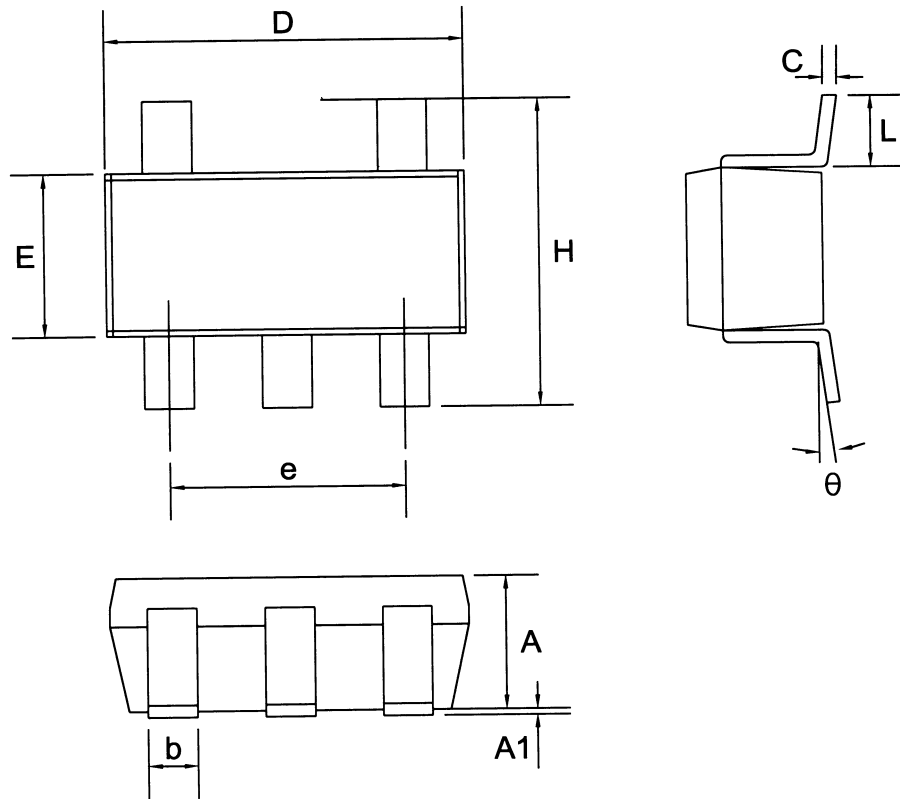
| Symbol   | Dimensions In Millimeters |      |      | Dimensions In Inches |       |       |
|----------|---------------------------|------|------|----------------------|-------|-------|
|          | Min                       | Nom  | Max  | Min                  | Nom   | Max   |
| A        | 1.02                      | 1.10 | 1.18 | 0.040                | 0.043 | 0.046 |
| A1       | 0.75                      | 0.80 | 0.85 | 0.030                | 0.031 | 0.033 |
| A2       | 0.25                      | 0.30 | 0.35 | 0.010                | 0.012 | 0.014 |
| b        | 0.30                      | 0.40 | 0.50 | 0.012                | 0.016 | 0.020 |
| C        | 0.05                      | 0.15 | 0.25 | 0.002                | 0.006 | 0.010 |
| D        | 2.80                      | 2.90 | 3.00 | 0.110                | 0.114 | 0.118 |
| E        | 1.45                      | 1.50 | 1.55 | 0.057                | 0.059 | 0.061 |
| e        | 1.70                      | 1.90 | 2.10 | 0.067                | 0.075 | 0.083 |
| H        | —                         | 4.65 | —    | —                    | 0.183 | —     |
| L        | 1.52                      | —    | —    | 0.060                | —     | —     |
| $\theta$ | 0°                        | —    | 10°  | 0°                   | —     | 10°   |

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# DIMENSION

SOT-25 DIMENSION (FIG. NO. DIM-SOT25-0103-B)



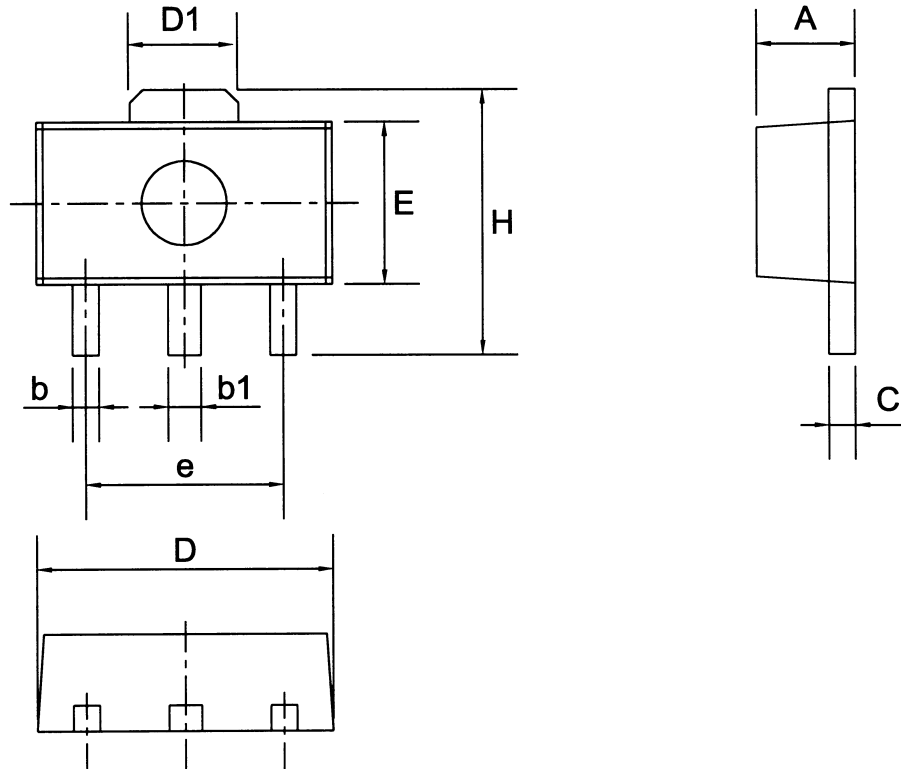
| Symbol   | Dimensions In Millimeters |      |      | Dimensions In Inches |       |       |
|----------|---------------------------|------|------|----------------------|-------|-------|
|          | Min                       | Nom  | Max  | Min                  | Nom   | Max   |
| A        | 1.00                      | 1.10 | 1.20 | 0.039                | 0.043 | 0.047 |
| A1       | 0.00                      | —    | 0.10 | 0.000                | —     | 0.004 |
| b        | 0.35                      | 0.40 | 0.50 | 0.014                | 0.016 | 0.020 |
| C        | 0.10                      | 0.15 | 0.25 | 0.004                | 0.006 | 0.010 |
| D        | 2.70                      | 2.90 | 3.10 | 0.106                | 0.114 | 0.122 |
| E        | 1.40                      | 1.60 | 1.80 | 0.055                | 0.063 | 0.071 |
| e        | —                         | 1.90 | —    | —                    | 0.075 | —     |
| H        | 2.60                      | 2.80 | 3.00 | 0.102                | 0.110 | 0.118 |
| L        | 0.35                      | 0.45 | 0.55 | 0.014                | 0.018 | 0.022 |
| $\theta$ | 0°                        | 5°   | 10°  | 0°                   | 5°    | 10°   |

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## DIMENSION

SOT-89 DIMENSION (FIG. NO. DIM-SOT89-0103-B)

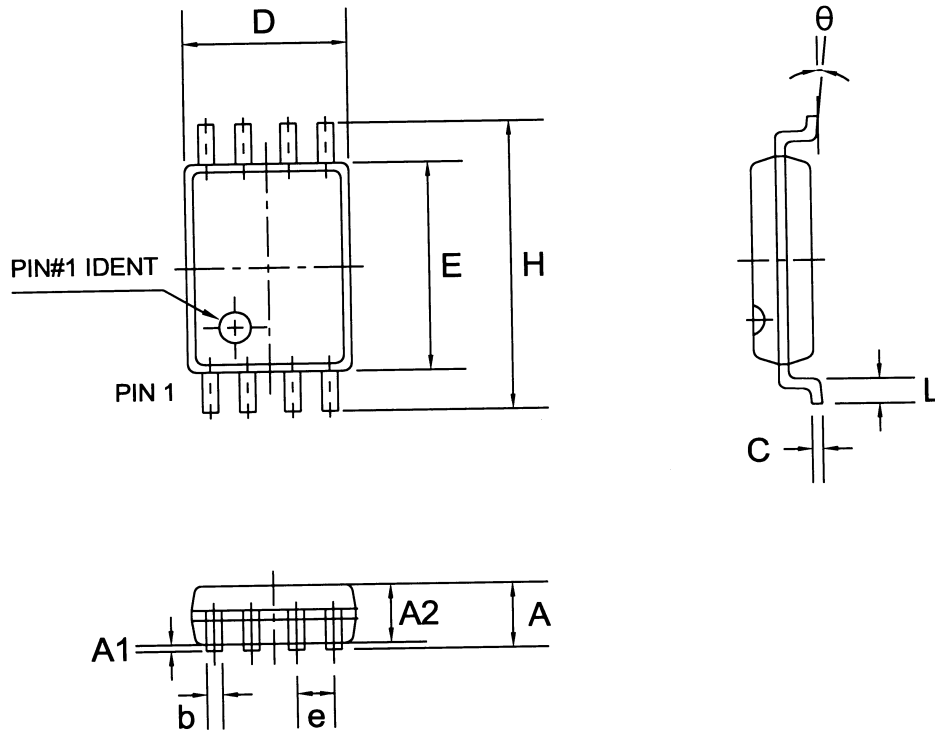


| Symbol | Dimensions In Millimeters |      |      | Dimensions In Inches |       |       |
|--------|---------------------------|------|------|----------------------|-------|-------|
|        | Min                       | Nom  | Max  | Min                  | Nom   | Max   |
| A      | 1.30                      | 1.50 | 1.70 | 0.051                | 0.059 | 0.067 |
| b      | 0.25                      | 0.40 | 0.55 | 0.010                | 0.016 | 0.022 |
| b1     | 0.40                      | 0.50 | 0.60 | 0.016                | 0.020 | 0.024 |
| C      | 0.30                      | 0.40 | 0.50 | 0.012                | 0.016 | 0.020 |
| D      | 4.30                      | 4.50 | 4.70 | 0.169                | 0.177 | 0.185 |
| D1     | 1.45                      | 1.65 | 1.85 | 0.057                | 0.065 | 0.073 |
| E      | 2.30                      | 2.50 | 2.70 | 0.091                | 0.098 | 0.106 |
| e      | 2.90                      | 3.00 | 3.10 | 0.114                | 0.118 | 0.122 |
| H      | 3.90                      | 4.10 | 4.30 | 0.154                | 0.161 | 0.169 |

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# DIMENSION

TSSOP-8 DIMENSION (FIG. NO. DIM-TSSOP8-0103-B)

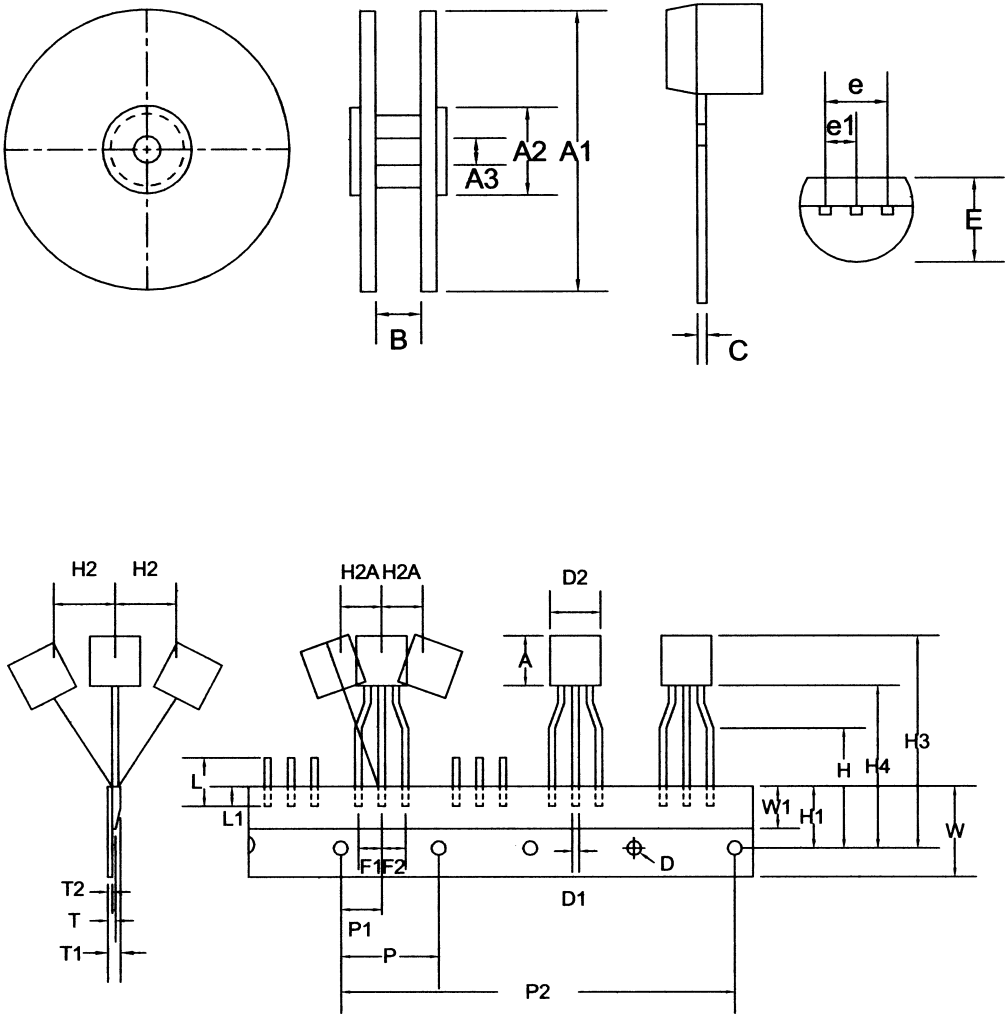


| Symbol   | Dimensions In Millimeters |       |      | Dimensions In Inches |       |       |
|----------|---------------------------|-------|------|----------------------|-------|-------|
|          | Min                       | Nom   | Max  | Min                  | Nom   | Max   |
| A        | 1.05                      | 1.10  | 1.20 | 0.041                | 0.043 | 0.047 |
| A1       | 0.05                      | 0.10  | 0.15 | 0.002                | 0.004 | 0.006 |
| A2       | 0.90                      | 1.00  | 1.10 | 0.035                | 0.039 | 0.043 |
| b        | —                         | 0.27  | —    | —                    | 0.011 | —     |
| C        | —                         | 0.127 | —    | —                    | 0.005 | —     |
| D        | 2.90                      | 3.05  | 3.10 | 0.114                | 0.120 | 0.122 |
| E        | 4.30                      | 4.40  | 4.50 | 0.169                | 0.173 | 0.177 |
| e        | —                         | 0.65  | —    | —                    | 0.026 | —     |
| H        | 6.20                      | 6.40  | 6.60 | 0.244                | 0.252 | 0.260 |
| L        | 0.50                      | 0.60  | 0.70 | 0.020                | 0.024 | 0.028 |
| $\theta$ | 0°                        | —     | 8°   | 0°                   | —     | 8°    |

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# DIMENSION

TAPING TO-92 DIMENSION (FIG. NO. DIM-TAPING-TO92-0105-C 1/2)



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## DIMENSION

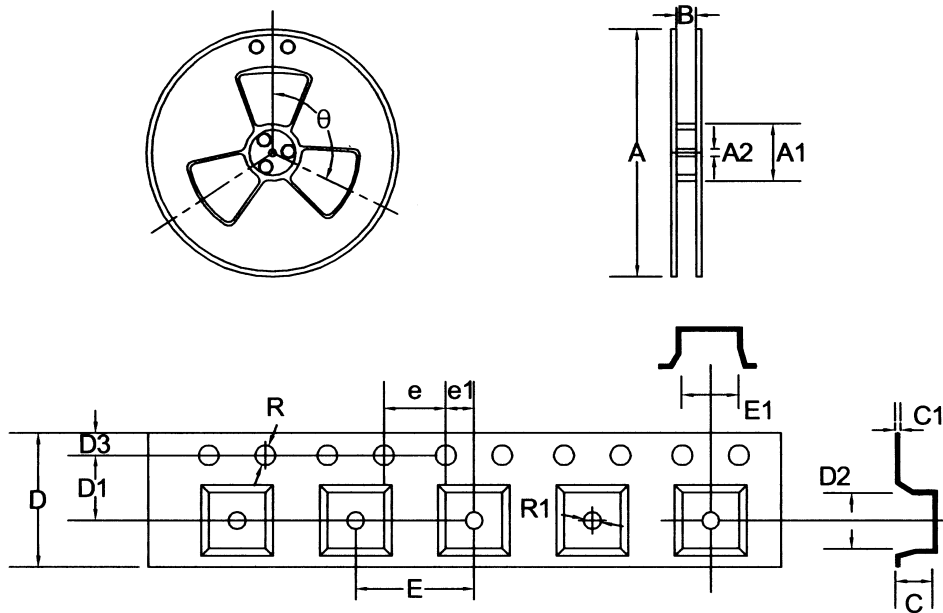
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TAPING TO-92 DIMENSION (FIG. NO. DIM-TAPING-TO92-0105-C 2/2)

| Symbol | Dimensions In Millimeters |        |        | Dimensions In Inches |        |        |
|--------|---------------------------|--------|--------|----------------------|--------|--------|
|        | Min                       | Nom    | Max    | Min                  | Nom    | Max    |
| A      | 4.33                      | 4.58   | 4.83   | 0.170                | 0.180  | 0.190  |
| A1     | 357.00                    | 360.00 | 363.00 | 14.055               | 14.173 | 14.291 |
| A2     | 89.00                     | 90.00  | 91.00  | 3.504                | 3.543  | 3.583  |
| A3     | 29.00                     | 30.00  | 31.00  | 1.142                | 1.181  | 1.220  |
| B      | 44.00                     | 45.00  | 46.00  | 1.732                | 1.772  | 1.811  |
| C      | —                         | 0.40   | —      | —                    | 0.016  | —      |
| D      | 3.80                      | 4.00   | 4.20   | 0.150                | 0.157  | 0.165  |
| D1     | 0.36                      | 0.44   | 0.53   | 0.014                | 0.017  | 0.021  |
| D2     | 4.33                      | 4.58   | 4.83   | 0.170                | 0.180  | 0.190  |
| E      | 3.30                      | 3.50   | 3.70   | 0.130                | 0.138  | 0.146  |
| e      | —                         | 2.54   | —      | —                    | 0.100  | —      |
| e1     | —                         | 1.27   | —      | —                    | 0.050  | —      |
| F1,F2  | 2.40                      | 2.65   | 2.90   | 0.094                | 0.104  | 0.114  |
| F1-F2  | -0.30                     | 0.00   | +0.30  | -0.012               | 0.000  | +0.012 |
| H      | 15.50                     | 16.00  | 16.50  | 0.610                | 0.630  | 0.650  |
| H1     | 8.50                      | 9.00   | 9.50   | 0.335                | 0.354  | 0.374  |
| H2     | —                         | —      | 1.00   | —                    | —      | 0.039  |
| H2A    | —                         | —      | 1.00   | —                    | —      | 0.039  |
| H3     | —                         | —      | 27.00  | —                    | —      | 1.063  |
| H4     | —                         | —      | 21.00  | —                    | —      | 0.827  |
| L      | —                         | —      | 11.00  | —                    | —      | 0.433  |
| L1     | 2.50                      | —      | —      | 0.098                | —      | —      |
| P      | 12.50                     | 12.70  | 12.90  | 0.492                | 0.500  | 0.508  |
| P1     | 5.95                      | 6.35   | 6.75   | 0.234                | 0.250  | 0.266  |
| P2     | 50.30                     | 50.80  | 51.30  | 1.980                | 2.000  | 2.020  |
| T      | —                         | —      | 0.55   | —                    | —      | 0.022  |
| T1     | —                         | —      | 1.42   | —                    | —      | 0.056  |
| T2     | 0.36                      | 0.52   | 0.68   | 0.014                | 0.020  | 0.027  |
| W      | 17.50                     | 18.25  | 19.00  | 0.689                | 0.719  | 0.748  |
| W1     | 5.00                      | 6.00   | 7.00   | 0.197                | 0.236  | 0.276  |

## DIMENSION

TAPING SOP-8 DIMENSION (FIG. NO. DIM-TAPING-SOP8-0104-B)

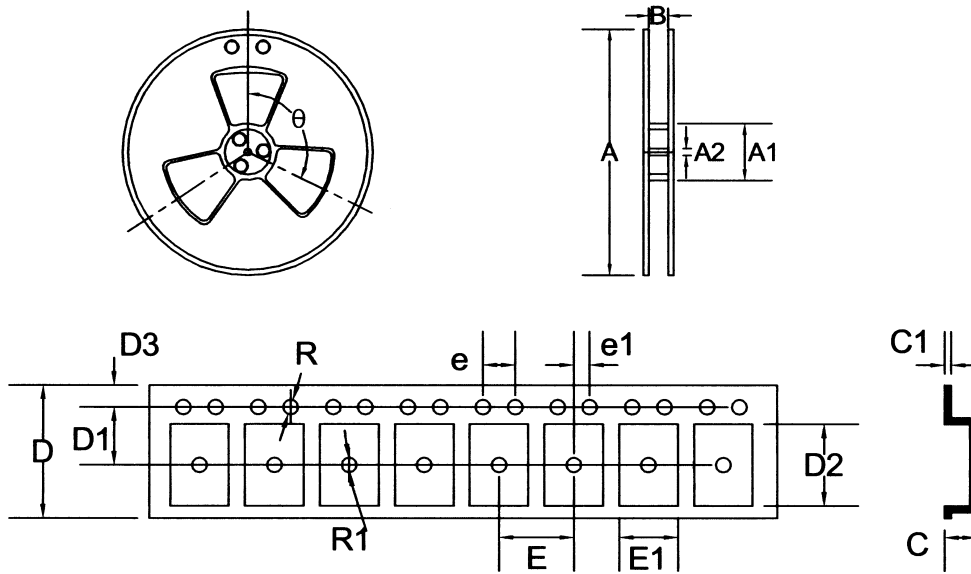


| Symbol | Dimensions In Millimeters |        |        | Dimensions In Inches |        |        |
|--------|---------------------------|--------|--------|----------------------|--------|--------|
|        | Min                       | Nom    | Max    | Min                  | Nom    | Max    |
| A      | 327.00                    | 330.00 | 333.00 | 12.874               | 12.992 | 13.110 |
| A1     | 99.00                     | 100.00 | 101.00 | 3.898                | 3.937  | 3.976  |
| A2     | 13.30                     | 13.50  | 13.70  | 0.524                | 0.531  | 0.539  |
| B      | 12.20                     | 12.50  | 12.80  | 0.480                | 0.492  | 0.504  |
| C      | 2.01                      | 2.11   | 2.21   | 0.079                | 0.083  | 0.087  |
| C1     | 0.19                      | 0.29   | 0.39   | 0.007                | 0.011  | 0.015  |
| D      | 11.70                     | 12.00  | 12.30  | 0.461                | 0.472  | 0.484  |
| D1     | 5.45                      | 5.50   | 5.55   | 0.215                | 0.217  | 0.219  |
| D2     | 5.11                      | 5.21   | 5.31   | 0.201                | 0.205  | 0.209  |
| D3     | 1.65                      | 1.75   | 1.85   | 0.065                | 0.069  | 0.073  |
| E      | 7.90                      | 8.00   | 8.10   | 0.311                | 0.315  | 0.319  |
| E1     | 6.30                      | 6.40   | 6.50   | 0.248                | 0.252  | 0.256  |
| e      | 3.90                      | 4.00   | 4.10   | 0.154                | 0.157  | 0.161  |
| 10e    | 39.80                     | 40.00  | 40.20  | 1.567                | 1.575  | 1.583  |
| e1     | 1.95                      | 2.00   | 2.05   | 0.077                | 0.079  | 0.081  |
| R      | 1.45                      | 1.50   | 1.60   | 0.057                | 0.059  | 0.063  |
| R1     | 1.45                      | 1.50   | 1.75   | 0.057                | 0.059  | 0.069  |
| θ      | —                         | 120°   | —      | —                    | 120°   | —      |

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# DIMENSION

TAPING SOP-14 DIMENSION (FIG. NO. DIM-TAPING-SOP16-0104-B)

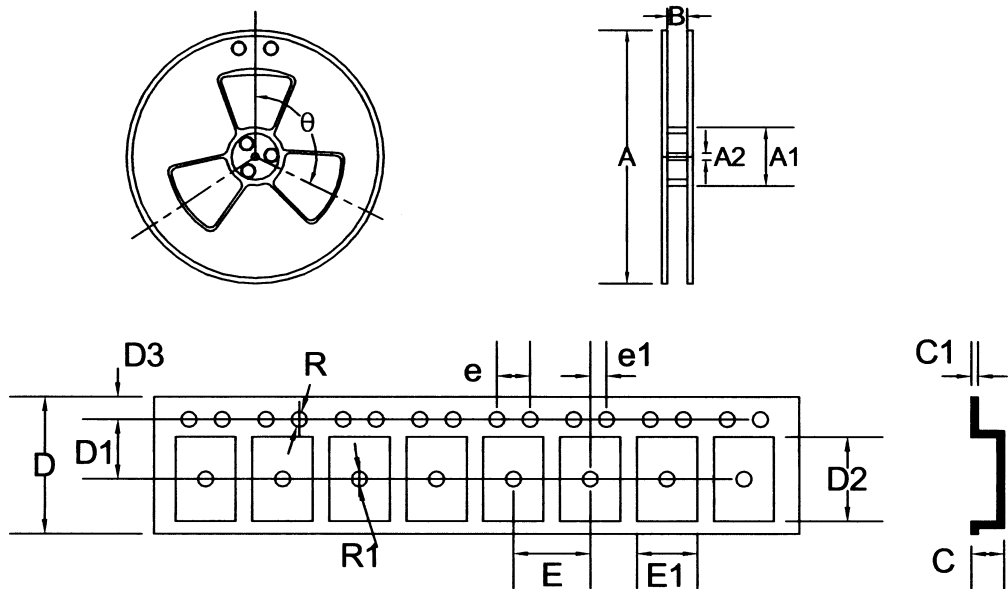


| Symbol | Dimensions In Millimeters |        |        | Dimensions In Inches |        |        |
|--------|---------------------------|--------|--------|----------------------|--------|--------|
|        | Min                       | Nom    | Max    | Min                  | Nom    | Max    |
| A      | 327.00                    | 330.00 | 333.00 | 12.874               | 12.992 | 13.110 |
| A1     | 99.00                     | 100.00 | 101.00 | 3.898                | 3.937  | 3.976  |
| A2     | 13.30                     | 13.50  | 13.70  | 0.524                | 0.531  | 0.539  |
| B      | 16.20                     | 16.50  | 16.80  | 0.638                | 0.650  | 0.661  |
| C      | 2.00                      | 2.10   | 2.20   | 0.079                | 0.083  | 0.087  |
| C1     | 0.25                      | 0.30   | 0.35   | 0.010                | 0.012  | 0.014  |
| D      | 15.70                     | 16.00  | 16.30  | 0.618                | 0.630  | 0.642  |
| D1     | 7.40                      | 7.50   | 7.60   | 0.291                | 0.295  | 0.299  |
| D2     | 10.20                     | 10.30  | 10.40  | 0.402                | 0.406  | 0.409  |
| D3     | 1.65                      | 1.75   | 1.85   | 0.065                | 0.069  | 0.073  |
| E      | 7.90                      | 8.00   | 8.10   | 0.311                | 0.315  | 0.319  |
| E1     | 6.40                      | 6.50   | 6.60   | 0.252                | 0.256  | 0.260  |
| e      | 3.90                      | 4.00   | 4.10   | 0.154                | 0.157  | 0.161  |
| e1     | 1.90                      | 2.00   | 2.10   | 0.075                | 0.079  | 0.083  |
| R      | 1.45                      | 1.50   | 1.60   | 0.057                | 0.059  | 0.063  |
| R1     | 1.45                      | 1.50   | 1.75   | 0.057                | 0.059  | 0.069  |
| θ      | —                         | 120°   | —      | —                    | 120°   | —      |

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# DIMENSION

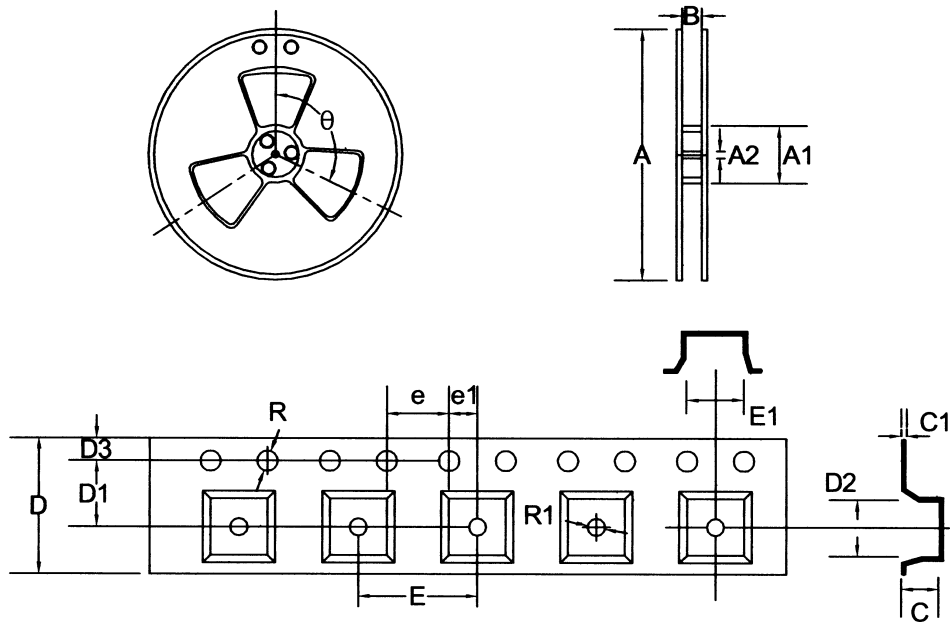
TAPING SOP-16 DIMENSION (FIG. NO. DIM-TAPING-SOP16-0104-B)



| Symbol   | Dimensions In Millimeters |        |        | Dimensions In Inches |        |        |
|----------|---------------------------|--------|--------|----------------------|--------|--------|
|          | Min                       | Nom    | Max    | Min                  | Nom    | Max    |
| A        | 327.00                    | 330.00 | 333.00 | 12.874               | 12.992 | 13.110 |
| A1       | 99.00                     | 100.00 | 101.00 | 3.898                | 3.937  | 3.976  |
| A2       | 13.30                     | 13.50  | 13.70  | 0.524                | 0.531  | 0.539  |
| B        | 16.20                     | 16.50  | 16.80  | 0.638                | 0.650  | 0.661  |
| C        | 2.00                      | 2.10   | 2.20   | 0.079                | 0.083  | 0.087  |
| C1       | 0.25                      | 0.30   | 0.35   | 0.010                | 0.012  | 0.014  |
| D        | 15.70                     | 16.00  | 16.30  | 0.618                | 0.630  | 0.642  |
| D1       | 7.40                      | 7.50   | 7.60   | 0.291                | 0.295  | 0.299  |
| D2       | 10.20                     | 10.30  | 10.40  | 0.402                | 0.406  | 0.409  |
| D3       | 1.65                      | 1.75   | 1.85   | 0.065                | 0.069  | 0.073  |
| E        | 7.90                      | 8.00   | 8.10   | 0.311                | 0.315  | 0.319  |
| E1       | 6.40                      | 6.50   | 6.60   | 0.252                | 0.256  | 0.260  |
| e        | 3.90                      | 4.00   | 4.10   | 0.154                | 0.157  | 0.161  |
| e1       | 1.90                      | 2.00   | 2.10   | 0.075                | 0.079  | 0.083  |
| R        | 1.45                      | 1.50   | 1.60   | 0.057                | 0.059  | 0.063  |
| R1       | 1.45                      | 1.50   | 1.75   | 0.057                | 0.059  | 0.069  |
| $\theta$ | —                         | 120°   | —      | —                    | 120°   | —      |

## DIMENSION

TAPING SOP-28 DIMENSION (FIG. NO. DIM-TAPING-SOP28-0104-B)

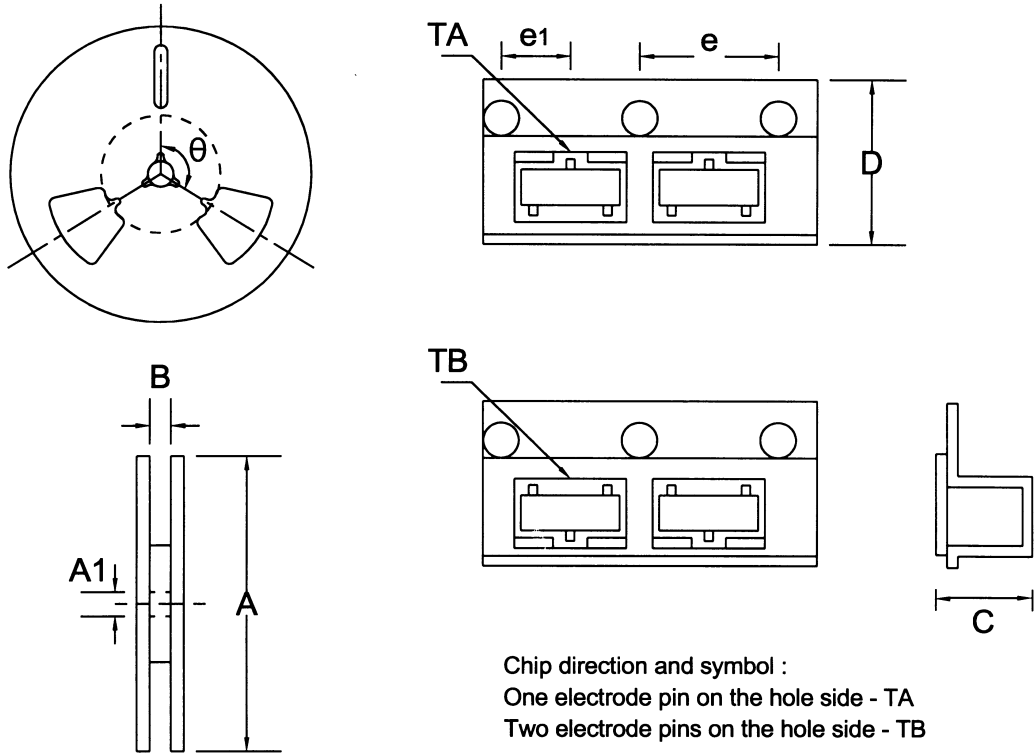


| Symbol | Dimensions In Millimeters |        |        | Dimensions In Inches |        |        |
|--------|---------------------------|--------|--------|----------------------|--------|--------|
|        | Min                       | Nom    | Max    | Min                  | Nom    | Max    |
| A      | 327.00                    | 330.00 | 333.00 | 12.874               | 12.992 | 13.110 |
| A1     | 99.00                     | 100.00 | 101.00 | 3.898                | 3.937  | 3.976  |
| A2     | 13.30                     | 13.50  | 13.70  | 0.524                | 0.531  | 0.539  |
| B      | 24.20                     | 24.50  | 24.80  | 0.953                | 0.965  | 0.976  |
| C      | 2.87                      | 2.97   | 3.07   | 0.113                | 0.117  | 0.121  |
| C1     | 0.25                      | 0.35   | 0.45   | 0.010                | 0.014  | 0.018  |
| D      | 23.70                     | 24.00  | 24.30  | 0.933                | 0.945  | 0.957  |
| D1     | 11.40                     | 11.50  | 11.60  | 0.449                | 0.453  | 0.457  |
| D2     | 18.24                     | 18.34  | 18.44  | 0.718                | 0.722  | 0.726  |
| D3     | 1.65                      | 1.75   | 1.85   | 0.065                | 0.069  | 0.073  |
| E      | 11.90                     | 12.00  | 12.10  | 0.469                | 0.472  | 0.476  |
| E1     | 10.75                     | 10.85  | 10.95  | 0.423                | 0.427  | 0.431  |
| e      | 3.90                      | 4.00   | 4.10   | 0.154                | 0.157  | 0.161  |
| 10e    | 39.80                     | 40.00  | 40.20  | 1.567                | 1.575  | 1.583  |
| e1     | 1.90                      | 2.00   | 2.10   | 0.075                | 0.079  | 0.083  |
| R      | 1.45                      | 1.50   | 1.60   | 0.057                | 0.059  | 0.063  |
| R1     | 1.45                      | 1.50   | 1.75   | 0.057                | 0.059  | 0.069  |
| θ      | —                         | 120°   | —      | —                    | 120°   | —      |

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## DIMENSION

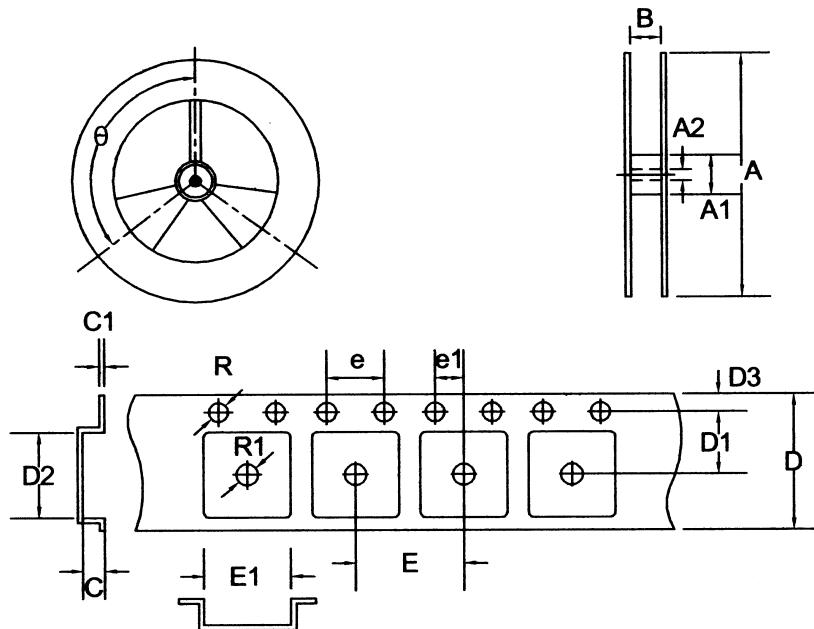
TAPING SOT-23 DIMENSION (FIG. NO. DIM-TAPING- SOT23-0104-B)



| Symbol | Dimensions In Millimeters |        |        | Dimensions In Inches |       |       |
|--------|---------------------------|--------|--------|----------------------|-------|-------|
|        | Min                       | Nom    | Max    | Min                  | Nom   | Max   |
| A      | 176.00                    | 178.00 | 180.00 | 6.929                | 7.008 | 7.087 |
| A1     | 12.80                     | 13.00  | 13.20  | 0.504                | 0.512 | 0.520 |
| B      | 9.80                      | 10.00  | 10.20  | 0.386                | 0.394 | 0.402 |
| C      | 1.45                      | 1.55   | 1.65   | 0.057                | 0.061 | 0.065 |
| D      | 7.80                      | 8.00   | 8.20   | 0.307                | 0.315 | 0.323 |
| e      | 3.90                      | 4.00   | 4.10   | 0.154                | 0.157 | 0.161 |
| e1     | 1.90                      | 2.00   | 2.10   | 0.075                | 0.079 | 0.083 |
| θ      | —                         | 120°   | —      | —                    | 120°  | —     |

# DIMENSION

TAPING SOT-223 DIMENSION (FIG. NO. DIM-TAPING-SOT223-0105-A)

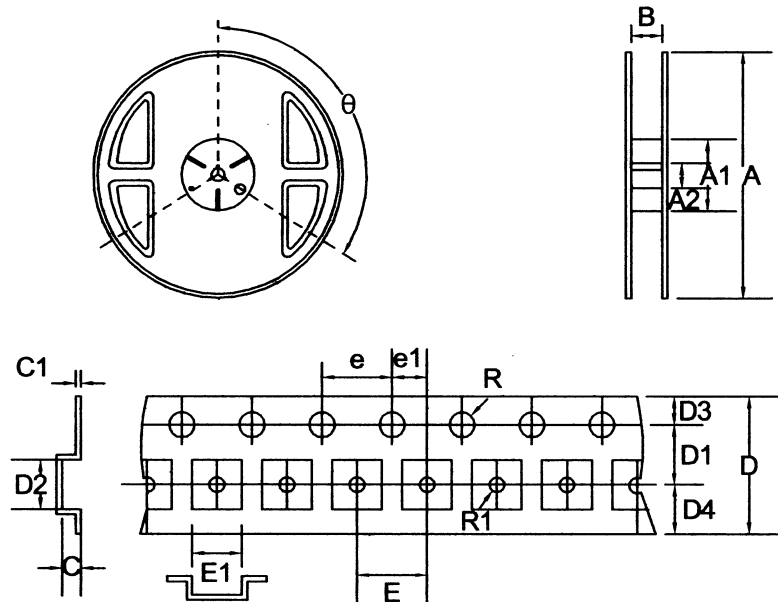


| Symbol | Dimensions In Millimeters |        |        | Dimensions In Inches |        |        |
|--------|---------------------------|--------|--------|----------------------|--------|--------|
|        | Min                       | Nom    | Max    | Min                  | Nom    | Max    |
| A      | 416.00                    | 420.00 | 424.00 | 16.378               | 16.535 | 16.693 |
| A1     | 78.00                     | 80.00  | 82.00  | 3.071                | 3.150  | 3.228  |
| A2     | 12.50                     | 13.00  | 13.50  | 0.492                | 0.512  | 0.531  |
| B      | 12.50                     | 13.50  | 14.50  | 0.492                | 0.531  | 0.571  |
| C      | 2.00                      | 2.10   | 2.20   | 0.079                | 0.083  | 0.087  |
| C1     | 0.25                      | 0.30   | 0.35   | 0.010                | 0.012  | 0.014  |
| D      | 11.70                     | 12.00  | 12.30  | 0.461                | 0.472  | 0.484  |
| D1     | 5.40                      | 5.50   | 5.60   | 0.213                | 0.217  | 0.220  |
| D2     | 7.40                      | 7.50   | 7.60   | 0.291                | 0.295  | 0.299  |
| D3     | 1.65                      | 1.75   | 1.85   | 0.065                | 0.069  | 0.073  |
| E      | 7.90                      | 8.00   | 8.10   | 0.311                | 0.315  | 0.319  |
| E1     | 6.80                      | 6.90   | 7.00   | 0.268                | 0.272  | 0.276  |
| e      | 3.90                      | 4.00   | 4.10   | 0.154                | 0.157  | 0.161  |
| e1     | 1.90                      | 2.00   | 2.10   | 0.075                | 0.079  | 0.083  |
| R      | 1.45                      | 1.50   | 1.60   | 0.057                | 0.059  | 0.063  |
| R1     | 1.45                      | 1.50   | 1.60   | 0.057                | 0.059  | 0.063  |
| θ      | —                         | 120°   | —      | —                    | 120°   | —      |

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# DIMENSION

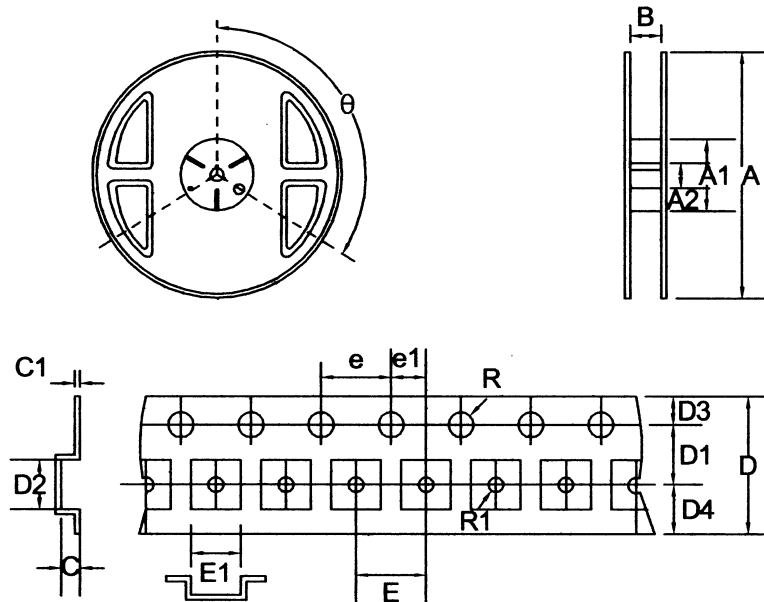
TAPING SOT-25 DIMENSION (FIG. NO. DIM-TAPING-SOT25/26-0105-A)



| Symbol   | Dimensions In Millimeters |        |        | Dimensions In Inches |       |       |
|----------|---------------------------|--------|--------|----------------------|-------|-------|
|          | Min                       | Nom    | Max    | Min                  | Nom   | Max   |
| A        | 178.00                    | 180.00 | 182.00 | 7.008                | 7.087 | 7.165 |
| A1       | 59.00                     | 60.00  | 61.00  | 2.323                | 2.362 | 2.402 |
| A2       | 12.80                     | 13.00  | 13.20  | 0.504                | 0.512 | 0.520 |
| B        | 8.70                      | 9.00   | 9.30   | 0.343                | 0.354 | 0.366 |
| C        | 1.40                      | 1.50   | 1.60   | 0.055                | 0.059 | 0.063 |
| C1       | 0.20                      | 0.25   | 0.30   | 0.008                | 0.010 | 0.012 |
| D        | 7.80                      | 8.00   | 8.20   | 0.307                | 0.315 | 0.323 |
| D1       | 3.45                      | 3.50   | 3.55   | 0.136                | 0.138 | 0.140 |
| D2       | 3.10                      | 3.20   | 3.30   | 0.122                | 0.126 | 0.130 |
| D3       | 1.65                      | 1.75   | 1.85   | 0.065                | 0.069 | 0.073 |
| D4       | 2.65                      | 2.75   | 2.85   | 0.104                | 0.108 | 0.112 |
| E        | 3.90                      | 4.00   | 4.10   | 0.154                | 0.157 | 0.161 |
| E1       | 3.20                      | 3.30   | 3.40   | 0.126                | 0.130 | 0.134 |
| e        | 3.90                      | 4.00   | 4.10   | 0.154                | 0.157 | 0.161 |
| e1       | 1.90                      | 2.00   | 2.10   | 0.075                | 0.079 | 0.083 |
| R        | 1.45                      | 1.50   | 1.60   | 0.057                | 0.059 | 0.063 |
| R1       | 1.00                      | 1.10   | 1.20   | 0.039                | 0.043 | 0.047 |
| $\theta$ | —                         | 120°   | —      | —                    | 120°  | —     |

## DIMENSION

TAPING SOT-26 DIMENSION (FIG. NO. DIM-TAPING-SOT25/26-0105-A)

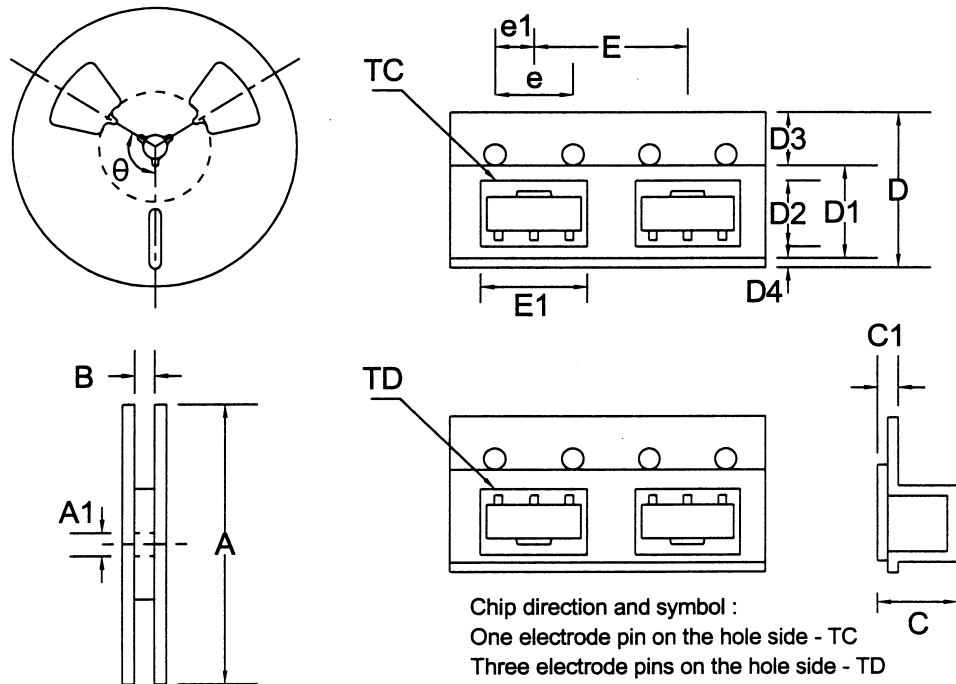


| Symbol   | Dimensions In Millimeters |        |        | Dimensions In Inches |       |       |
|----------|---------------------------|--------|--------|----------------------|-------|-------|
|          | Min                       | Nom    | Max    | Min                  | Nom   | Max   |
| A        | 178.00                    | 180.00 | 182.00 | 7.008                | 7.087 | 7.165 |
| A1       | 59.00                     | 60.00  | 61.00  | 2.323                | 2.362 | 2.402 |
| A2       | 12.80                     | 13.00  | 13.20  | 0.504                | 0.512 | 0.520 |
| B        | 8.70                      | 9.00   | 9.30   | 0.343                | 0.354 | 0.366 |
| C        | 1.40                      | 1.50   | 1.60   | 0.055                | 0.059 | 0.063 |
| C1       | 0.20                      | 0.25   | 0.30   | 0.008                | 0.010 | 0.012 |
| D        | 7.80                      | 8.00   | 8.20   | 0.307                | 0.315 | 0.323 |
| D1       | 3.45                      | 3.50   | 3.55   | 0.136                | 0.138 | 0.140 |
| D2       | 3.10                      | 3.20   | 3.30   | 0.122                | 0.126 | 0.130 |
| D3       | 1.65                      | 1.75   | 1.85   | 0.065                | 0.069 | 0.073 |
| D4       | 2.65                      | 2.75   | 2.85   | 0.104                | 0.108 | 0.112 |
| E        | 3.90                      | 4.00   | 4.10   | 0.154                | 0.157 | 0.161 |
| E1       | 3.20                      | 3.30   | 3.40   | 0.126                | 0.130 | 0.134 |
| e        | 3.90                      | 4.00   | 4.10   | 0.154                | 0.157 | 0.161 |
| e1       | 1.90                      | 2.00   | 2.10   | 0.075                | 0.079 | 0.083 |
| R        | 1.45                      | 1.50   | 1.60   | 0.057                | 0.059 | 0.063 |
| R1       | 1.00                      | 1.10   | 1.20   | 0.039                | 0.043 | 0.047 |
| $\theta$ | —                         | 120°   | —      | —                    | 120°  | —     |

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## DIMENSION

TAPING SOT-89 DIMENSION (FIG. NO. DIM-TAPING-SOT89-0104-B)

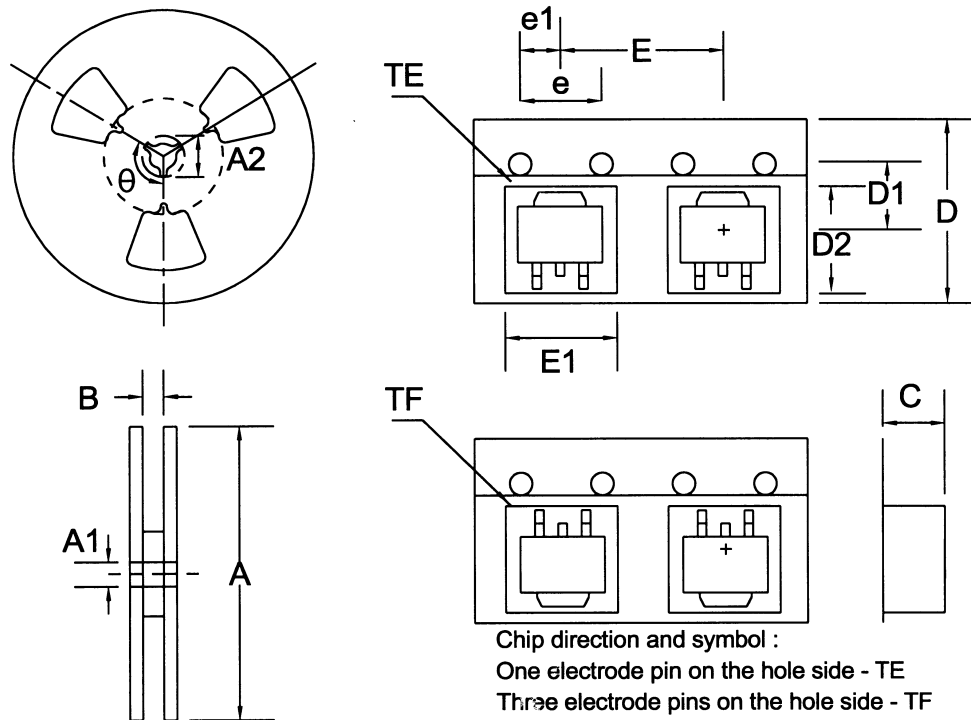


| Symbol | Dimensions In Millimeters |        |        | Dimensions In Inches |       |       |
|--------|---------------------------|--------|--------|----------------------|-------|-------|
|        | Min                       | Nom    | Max    | Min                  | Nom   | Max   |
| A      | 176.00                    | 178.00 | 180.00 | 6.929                | 7.008 | 7.087 |
| A1     | 12.80                     | 13.00  | 13.20  | 0.504                | 0.512 | 0.520 |
| B      | 13.80                     | 14.00  | 14.20  | 0.543                | 0.551 | 0.559 |
| C      | 1.80                      | 1.90   | 2.00   | 0.071                | 0.075 | 0.079 |
| C1     | 0.35                      | 0.40   | 0.45   | 0.014                | 0.016 | 0.018 |
| D      | 11.70                     | 12.00  | 12.30  | 0.460                | 0.472 | 0.484 |
| D1     | 9.30                      | 9.50   | 9.70   | 0.366                | 0.374 | 0.382 |
| D2     | 4.40                      | 4.50   | 4.60   | 0.173                | 0.177 | 0.181 |
| D3     | 1.40                      | 1.50   | 1.60   | 0.055                | 0.060 | 0.063 |
| D4     | 0.45                      | 0.50   | 0.55   | 0.018                | 0.020 | 0.022 |
| E      | 7.90                      | 8.00   | 8.10   | 0.311                | 0.315 | 0.319 |
| E1     | 4.80                      | 4.90   | 5.00   | 0.189                | 0.193 | 0.197 |
| e      | 3.90                      | 4.00   | 4.10   | 0.154                | 0.157 | 0.161 |
| e1     | 1.90                      | 2.00   | 2.10   | 0.075                | 0.079 | 0.083 |
| θ      | —                         | 120°   | —      | —                    | 120°  | —     |

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# DIMENSION

TAPING TO-252 DIMENSION (FIG. NO. DIM-TAPING-TO252-0104-B)

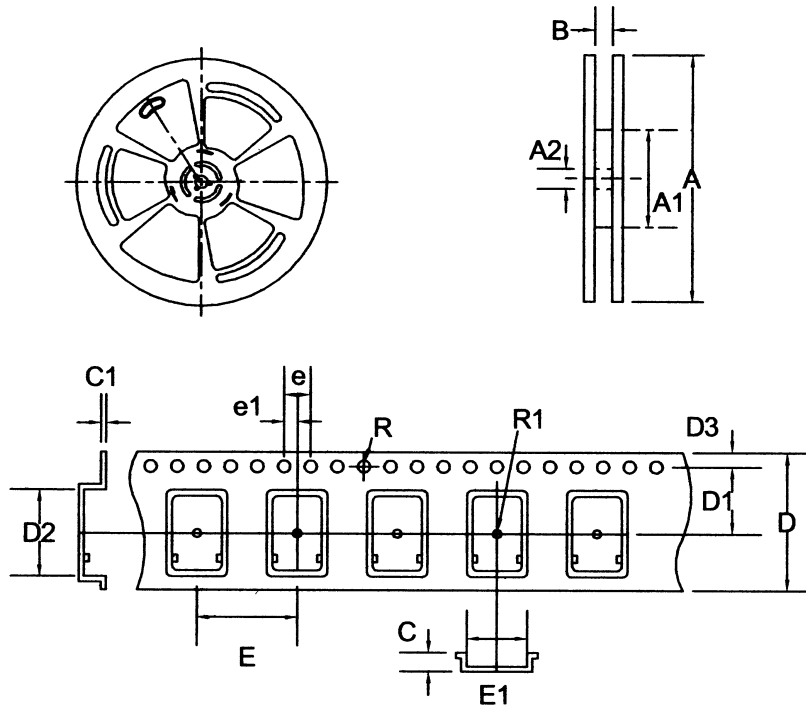


| Symbol | Dimensions In Millimeters |        |        | Dimensions In Inches |        |        |
|--------|---------------------------|--------|--------|----------------------|--------|--------|
|        | Min                       | Nom    | Max    | Min                  | Nom    | Max    |
| A      | 327.00                    | 330.00 | 333.00 | 12.874               | 12.992 | 13.110 |
| A1     | 12.80                     | 13.00  | 13.20  | 0.504                | 0.512  | 0.520  |
| A2     | 20.20                     | —      | —      | 0.795                | —      | —      |
| B      | 17.00                     | 17.50  | 18.00  | 0.669                | 0.689  | 0.709  |
| C      | 2.69                      | 2.79   | 2.89   | 0.106                | 0.110  | 0.114  |
| D      | 15.70                     | 16.00  | 16.30  | 0.618                | 0.630  | 0.642  |
| D1     | 7.40                      | 7.50   | 7.60   | 0.291                | 0.295  | 0.299  |
| D2     | 10.29                     | 10.49  | 10.69  | 0.405                | 0.413  | 0.421  |
| E      | 7.90                      | 8.00   | 8.10   | 0.311                | 0.315  | 0.319  |
| E1     | 6.86                      | 6.96   | 7.06   | 0.270                | 0.274  | 0.278  |
| e      | 3.90                      | 4.00   | 4.10   | 0.154                | 0.157  | 0.161  |
| e1     | 1.90                      | 2.00   | 2.10   | 0.075                | 0.079  | 0.083  |
| θ      | —                         | 120°   | —      | —                    | 120°   | —      |

UTC UNISONIC TECHNOLOGIES CO., LTD.

## DIMENSION

TAPING TO-263 DIMENSION (FIG. NO. DIM-TAPING-TO263-0105-A)

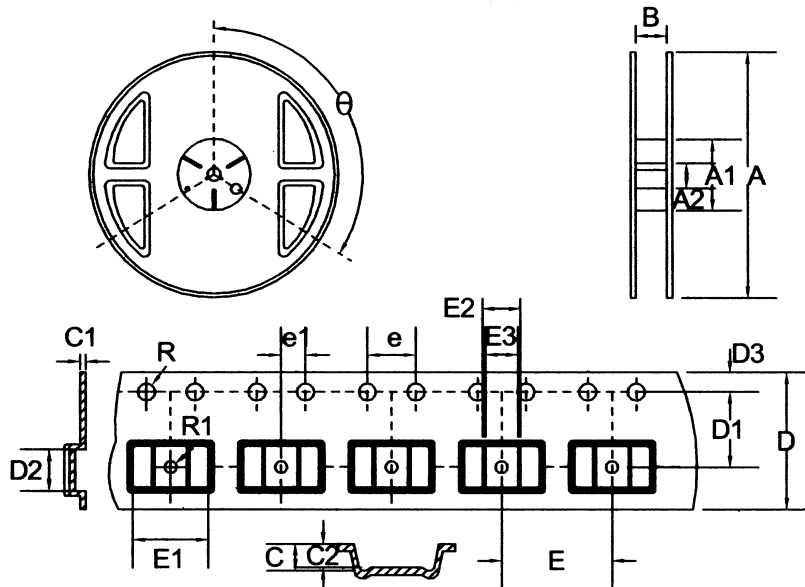


| Symbol | Dimensions In Millimeters |        |        | Dimensions In Inches |        |        |
|--------|---------------------------|--------|--------|----------------------|--------|--------|
|        | Min                       | Nom    | Max    | Min                  | Nom    | Max    |
| A      | 377.00                    | 380.00 | 383.00 | 14.843               | 14.961 | 15.079 |
| A1     | 96.00                     | 97.00  | 98.00  | 3.780                | 3.819  | 3.858  |
| A2     | 12.50                     | 13.00  | 13.50  | 0.492                | 0.512  | 0.531  |
| B      | 20.00                     | 24.00  | 28.00  | 0.787                | 0.945  | 1.102  |
| C      | 4.80                      | 4.90   | 5.00   | 0.189                | 0.193  | 0.197  |
| C1     | 0.30                      | 0.35   | 0.40   | 0.012                | 0.014  | 0.016  |
| D      | 23.70                     | 24.00  | 24.30  | 0.933                | 0.945  | 0.957  |
| D1     | 11.35                     | 11.50  | 11.65  | 0.447                | 0.453  | 0.459  |
| D2     | 15.80                     | 15.90  | 16.00  | 0.622                | 0.626  | 0.630  |
| D3     | 1.65                      | 1.75   | 1.85   | 0.065                | 0.069  | 0.073  |
| E      | 15.90                     | 16.00  | 16.10  | 0.626                | 0.630  | 0.634  |
| E1     | 10.70                     | 10.80  | 10.90  | 0.421                | 0.425  | 0.429  |
| e      | 3.90                      | 4.00   | 4.10   | 0.154                | 0.157  | 0.161  |
| e1     | 1.85                      | 2.00   | 2.15   | 0.073                | 0.079  | 0.085  |
| R      | 1.45                      | 1.50   | 1.60   | 0.057                | 0.059  | 0.063  |
| R1     | 1.90                      | 2.00   | 2.10   | 0.075                | 0.079  | 0.083  |

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## DIMENSION

TAPING TSSOP-8 DIMENSION (FIG. NO. DIM-TAPING-TSSOP8-0105-A)



| Symbol   | Dimensions In Millimeters |        |        | Dimensions In Inches |       |       |
|----------|---------------------------|--------|--------|----------------------|-------|-------|
|          | Min                       | Nom    | Max    | Min                  | Nom   | Max   |
| A        | 178.00                    | 180.00 | 182.00 | 7.008                | 7.087 | 7.165 |
| A1       | 59.00                     | 60.00  | 61.00  | 2.323                | 2.362 | 2.402 |
| A2       | 12.80                     | 13.00  | 13.20  | 0.504                | 0.512 | 0.520 |
| B        | 11.00                     | 12.00  | 13.00  | 0.433                | 0.472 | 0.512 |
| C        | 1.50                      | 1.60   | 1.70   | 0.060                | 0.063 | 0.067 |
| C1       | 0.25                      | 0.30   | 0.35   | 0.010                | 0.012 | 0.014 |
| C2       | 1.20                      | 1.30   | 1.40   | 0.047                | 0.051 | 0.055 |
| D        | 11.70                     | 12.00  | 12.30  | 0.461                | 0.472 | 0.484 |
| D1       | 5.40                      | 5.50   | 5.60   | 0.213                | 0.217 | 0.220 |
| D2       | 3.30                      | 3.40   | 3.50   | 0.130                | 0.134 | 0.138 |
| D3       | 1.65                      | 1.75   | 1.85   | 0.065                | 0.069 | 0.073 |
| E        | 7.90                      | 8.00   | 8.10   | 0.311                | 0.315 | 0.319 |
| E1       | 6.70                      | 6.80   | 6.90   | 0.264                | 0.268 | 0.272 |
| E2       | 4.30                      | 4.40   | 4.50   | 0.170                | 0.173 | 0.177 |
| E3       | 3.70                      | 3.80   | 3.90   | 0.146                | 0.150 | 0.154 |
| e        | 3.90                      | 4.00   | 4.10   | 0.154                | 0.157 | 0.161 |
| e1       | 1.90                      | 2.00   | 2.10   | 0.075                | 0.079 | 0.083 |
| R        | 1.45                      | 1.50   | 1.60   | 0.057                | 0.059 | 0.063 |
| R1       | 1.45                      | 1.50   | 1.60   | 0.057                | 0.059 | 0.063 |
| $\theta$ | —                         | 120°   | —      | —                    | 120°  | —     |

UTC UNISONIC TECHNOLOGIES CO., LTD.

## 射频和天线设计培训课程推荐

易迪拓培训([www.edatop.com](http://www.edatop.com))由数名来自于研发第一线的资深工程师发起成立,致力并专注于微波、射频、天线设计研发人才的培养;我们于 2006 年整合合并微波 EDA 网([www.mweda.com](http://www.mweda.com)),现已发展成为国内最大的微波射频和天线设计人才培养基地,成功推出多套微波射频以及天线设计经典培训课程和 ADS、HFSS 等专业软件使用培训课程,广受客户好评;并先后与人民邮电出版社、电子工业出版社合作出版了多本专业图书,帮助数万名工程师提升了专业技术能力。客户遍布中兴通讯、研通高频、埃威航电、国人通信等多家国内知名公司,以及台湾工业技术研究院、永业科技、全一电子等多家台湾地区企业。

易迪拓培训课程列表: <http://www.edatop.com/peixun/rfe/129.html>



### 射频工程师养成培训课程套装

该套装精选了射频专业基础培训课程、射频仿真设计培训课程和射频电路测量培训课程三个类别共 30 门视频培训课程和 3 本图书教材;旨在引领学员全面学习一个射频工程师需要熟悉、理解和掌握的专业知识和研发设计能力。通过套装的学习,能够让学员完全达到和胜任一个合格的射频工程师的要求...

课程网址: <http://www.edatop.com/peixun/rfe/110.html>

### ADS 学习培训课程套装

该套装是迄今国内最全面、最权威的 ADS 培训教程,共包含 10 门 ADS 学习培训课程。课程是由具有多年 ADS 使用经验的微波射频与通信系统设计领域资深专家讲解,并多结合设计实例,由浅入深、详细而又全面地讲解了 ADS 在微波射频电路设计、通信系统设计和电磁仿真设计方面的内容。能让您在最短的时间内学会使用 ADS,迅速提升个人技术能力,把 ADS 真正应用到实际研发工作中去,成为 ADS 设计专家...

课程网址: <http://www.edatop.com/peixun/ads/13.html>



### HFSS 学习培训课程套装



该套课程套装包含了本站全部 HFSS 培训课程,是迄今国内最全面、最专业的 HFSS 培训教程套装,可以帮助您从零开始,全面深入学习 HFSS 的各项功能和在多个方面的工程应用。购买套装,更可超值赠送 3 个月免费学习答疑,随时解答您学习过程中遇到的棘手问题,让您的 HFSS 学习更加轻松顺畅...

课程网址: <http://www.edatop.com/peixun/hfss/11.html>

## CST 学习培训课程套装

该培训套装由易迪拓培训联合微波 EDA 网共同推出,是最全面、系统、专业的 CST 微波工作室培训课程套装,所有课程都由经验丰富的专家授课,视频教学,可以帮助您从零开始,全面系统地学习 CST 微波工作的各项功能及其在微波射频、天线设计等领域的设计应用。且购买该套装,还可超值赠送 3 个月免费学习答疑...

课程网址: <http://www.edatop.com/peixun/cst/24.html>



## HFSS 天线设计培训课程套装

套装包含 6 门视频课程和 1 本图书,课程从基础讲起,内容由浅入深,理论介绍和实际操作讲解相结合,全面系统的讲解了 HFSS 天线设计的全过程。是国内最全面、最专业的 HFSS 天线设计课程,可以帮助您快速学习掌握如何使用 HFSS 设计天线,让天线设计不再难...

课程网址: <http://www.edatop.com/peixun/hfss/122.html>

## 13.56MHz NFC/RFID 线圈天线设计培训课程套装

套装包含 4 门视频培训课程,培训将 13.56MHz 线圈天线设计原理和仿真设计实践相结合,全面系统地讲解了 13.56MHz 线圈天线的工作原理、设计方法、设计考量以及使用 HFSS 和 CST 仿真分析线圈天线的具体操作,同时还介绍了 13.56MHz 线圈天线匹配电路的设计和调试。通过该套课程的学习,可以帮助您快速学习掌握 13.56MHz 线圈天线及其匹配电路的原理、设计和调试...

详情浏览: <http://www.edatop.com/peixun/antenna/116.html>



### 我们的课程优势:

- ※ 成立于 2004 年,10 多年丰富的行业经验,
- ※ 一直致力并专注于微波射频和天线设计工程师的培养,更了解该行业对人才的要求
- ※ 经验丰富的一线资深工程师讲授,结合实际工程案例,直观、实用、易学

### 联系我们:

- ※ 易迪拓培训官网: <http://www.edatop.com>
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