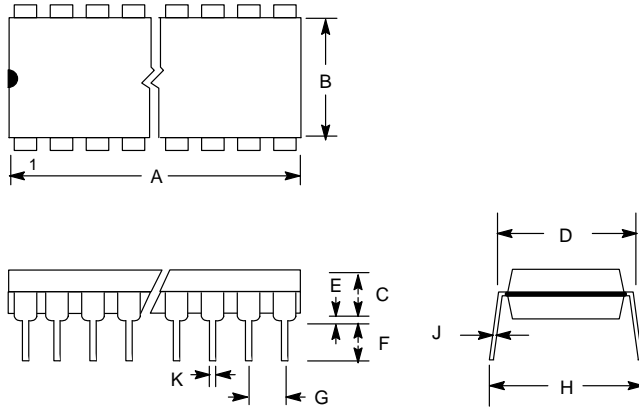


8- TO 28-PIN DIP (300 MIL)



Includes:

- | | | |
|---------|----------|---------|
| DS1000 | DS1211 | DS1621 |
| DS1000M | DS1215 | DS1625 |
| DS1003 | DS1221 | DS1632 |
| DS1003M | DS1222 | DS1640 |
| DS1004M | DS1228 | DS1651 |
| DS1005 | DS1229 | DS1652 |
| DS1005M | DS1231 | DS1652B |
| DS1007 | DS1232 | DS1653 |
| DS1010 | DS1232LP | DS1666 |
| DS1012M | DS1234 | DS1667 |
| DS1013 | DS1236 | DS1669 |
| DS1013M | DS1237 | DS1802 |
| DS1020 | DS1238 | DS1830 |
| DS1033M | DS1239 | DS1832 |
| DS1035M | DS1259 | DS1867 |
| DS1040M | DS1267 | DS1868 |
| DS1044 | DS1275 | DS1869 |
| DS1045 | DS1291 | DS2009D |
| DS1200 | DS1293 | DS2010D |
| DS1206 | DS1336 | DS2011D |
| DS1210 | DS1620 | DS2013D |

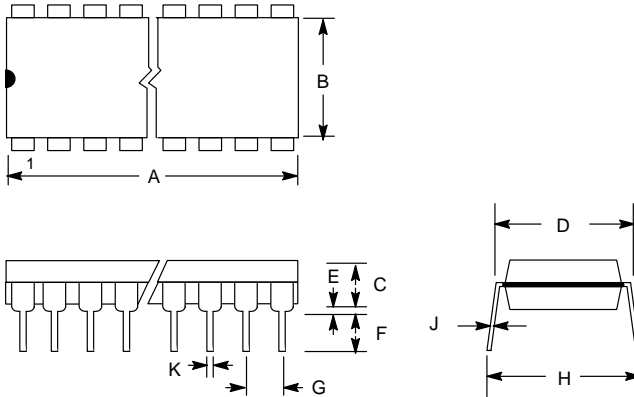
| PKG | 8-PIN | | 10-PIN | | 14-PIN | | 16-PIN | |
|-------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| DIM | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX |
| A IN. MM | 0.360 9.14 | 0.400 10.16 | 0.480 12.19 | 0.520 13.21 | 0.740 18.80 | 0.780 19.81 | 0.740 18.80 | 0.780 19.81 |
| B IN. MM | 0.240 6.10 | 0.260 6.60 | 0.240 6.10 | 0.260 6.60 | 0.240 6.10 | 0.260 6.60 | 0.240 6.10 | 0.260 6.60 |
| C IN. MM | 0.120 3.05 | 0.140 3.56 | 0.120 3.05 | 0.140 3.56 | 0.120 3.05 | 0.140 3.56 | 0.120 3.05 | 0.140 3.56 |
| D IN. MM | 0.300 7.62 | 0.325 8.26 | 0.300 7.62 | 0.325 8.26 | 0.300 7.62 | 0.325 8.26 | 0.300 7.62 | 0.325 8.26 |
| E IN. MM | 0.015 0.38 | 0.040 1.02 | 0.015 0.38 | 0.040 1.02 | 0.015 0.38 | 0.040 1.02 | 0.015 0.38 | 0.040 1.02 |
| F IN. MM | 0.120 3.04 | 0.140 3.56 | 0.110 2.79 | 0.130 3.30 | 0.120 3.04 | 0.140 3.56 | 0.120 3.04 | 0.140 3.56 |
| G IN. MM | 0.090 2.29 | 0.110 2.79 | 0.090 2.29 | 0.110 2.79 | 0.090 2.29 | 0.110 2.79 | 0.090 2.29 | 0.110 2.79 |
| H IN. MM | 0.320 8.13 | 0.370 9.40 | 0.320 8.13 | 0.370 9.40 | 0.320 8.13 | 0.370 9.40 | 0.320 8.13 | 0.370 9.40 |
| J IN. MM | 0.008 0.20 | 0.012 0.30 | 0.008 0.20 | 0.012 0.30 | 0.008 0.20 | 0.012 0.30 | 0.008 0.20 | 0.012 0.30 |
| K IN. MM | 0.015 0.38 | 0.021 0.53 | 0.015 0.38 | 0.021 0.53 | 0.015 0.38 | 0.021 0.53 | 0.015 0.38 | 0.021 0.53 |

Continued on following page.

MECHANICAL DRAWINGS

| PKG | 18-PIN | | 20-PIN | | 24-PIN | | 28-PIN | |
|---------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX |
| A IN. MM | 0.890 22.61 | 0.920 23.36 | 0.970 24.63 | 1.040 26.42 | 1.150 29.21 | 1.260 32.00 | 1.345 34.16 | 1.370 34.80 |
| B IN. MM | 0.240 6.10 | 0.260 6.60 | 0.240 6.09 | 0.270 6.86 | 0.250 6.35 | 0.270 6.86 | 0.270 6.85 | 0.295 7.49 |
| C IN. MM | 0.120 3.05 | 0.140 3.56 | 0.120 3.05 | 0.140 3.56 | 0.120 3.05 | 0.140 3.56 | 0.120 3.05 | 0.140 3.56 |
| D IN. MM | 0.300 7.62 | 0.325 8.26 | 0.295 7.49 | 0.325 8.26 | 0.300 7.62 | 0.325 8.26 | 0.300 7.62 | 0.325 8.26 |
| E IN. MM | 0.015 0.38 | 0.040 1.02 | 0.015 0.38 | 0.040 1.02 | 0.015 0.38 | 0.040 1.02 | 0.015 0.38 | 0.050 1.27 |
| F IN. MM | 0.120 3.04 | 0.140 3.56 | 0.120 3.04 | 0.140 3.56 | 0.125 3.18 | 0.135 3.48 | 0.125 3.18 | 0.135 3.48 |
| G IN. MM | 0.090 2.23 | 0.110 2.79 | 0.090 2.23 | 0.110 2.79 | 0.090 2.23 | 0.110 2.79 | 0.090 2.23 | 0.110 2.79 |
| H IN. MM | 0.320 8.13 | 0.370 9.40 | 0.310 7.87 | 0.390 9.91 | 0.320 8.13 | 0.370 9.40 | 0.320 8.13 | 0.370 9.40 |
| J IN. MM | 0.008 0.20 | 0.012 0.30 | 0.008 0.20 | 0.012 0.30 | 0.008 0.20 | 0.012 0.30 | 0.008 0.20 | 0.012 0.30 |
| K IN. MM | 0.015 0.38 | 0.021 0.53 | 0.015 0.38 | 0.021 0.53 | 0.015 0.38 | 0.022 0.56 | 0.015 0.38 | 0.022 0.56 |

24- TO 40-PIN DIP (600 MIL)

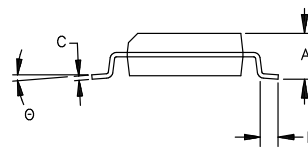
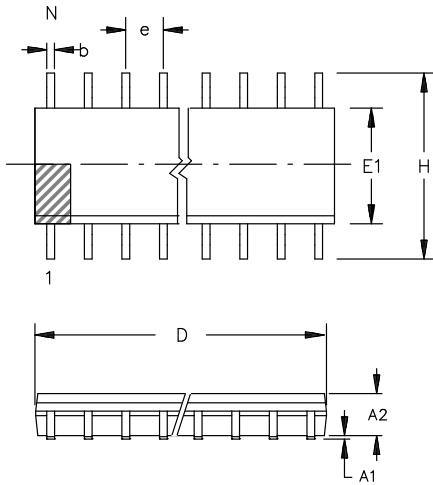


Includes:
 DS1212
 DS1609
 DS2009
 DS2010
 DS2011
 DS2012
 DS2013

| PKG | 24-PIN | | 28-PIN | | 40-PIN | |
|--------------|--------|-------|--------|-------|--------|-------|
| | MIN | MAX | MIN | MAX | MIN | MAX |
| A IN. | 1.245 | 1.270 | 1.445 | 1.470 | 2.050 | 2.075 |
| MM | 31.62 | 32.25 | 36.70 | 37.34 | 52.07 | 52.71 |
| B IN. | 0.530 | 0.550 | 0.530 | 0.550 | 0.530 | 0.550 |
| MM | 13.46 | 13.97 | 13.46 | 13.97 | 13.46 | 13.97 |
| C IN. | 0.140 | 0.160 | 0.140 | 0.160 | 0.140 | 0.160 |
| MM | 3.56 | 4.06 | 3.56 | 4.06 | 3.56 | 4.06 |
| D IN. | 0.600 | 0.625 | 0.600 | 0.625 | 0.600 | 0.625 |
| MM | 15.24 | 15.88 | 15.24 | 15.88 | 15.24 | 15.88 |
| E IN. | 0.015 | 0.050 | 0.015 | 0.040 | 0.015 | 0.040 |
| MM | 0.380 | 1.27 | 0.380 | 1.02 | 0.380 | 1.02 |
| F IN. | 0.120 | 0.145 | 0.120 | 0.145 | 0.120 | 0.145 |
| MM | 3.05 | 3.68 | 3.05 | 3.68 | 3.05 | 3.68 |
| G IN. | 0.090 | 0.110 | 0.090 | 0.110 | 0.090 | 0.110 |
| MM | 2.29 | 2.79 | 2.29 | 2.79 | 2.29 | 2.79 |
| H IN. | 0.625 | 0.675 | 0.625 | 0.675 | 0.625 | 0.675 |
| MM | 15.88 | 17.15 | 15.88 | 17.15 | 15.88 | 17.15 |
| J IN. | 0.008 | 0.012 | 0.008 | 0.012 | 0.008 | 0.012 |
| MM | 0.20 | 0.30 | 0.20 | 0.30 | 0.20 | 0.30 |
| K IN. | 0.015 | 0.022 | 0.015 | 0.022 | 0.015 | 0.022 |
| MM | 0.38 | 0.56 | 0.38 | 0.56 | 0.38 | 0.56 |

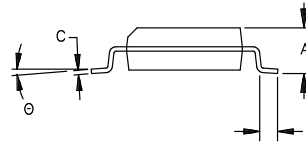
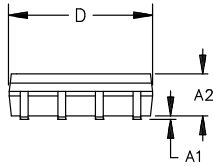
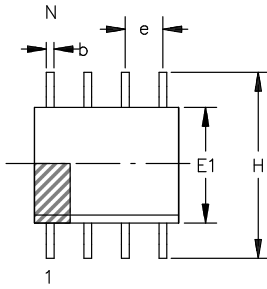
MECHANICAL DRAWINGS

8-, 14-, AND 16-PIN SOIC (.150" BODY WIDTH)



| PKG | 8-PIN | | 14-PIN | | 16-PIN | |
|--------------|-----------------------|---------------|-----------------------|---------------|-----------------------|---------------|
| DIM | MIN | MAX | MIN | MAX | MIN | MAX |
| A IN. MM | 0.053 1.35 | 0.069 1.75 | 0.053 1.35 | 0.069 1.75 | 0.053 1.35 | 0.069 1.75 |
| A1 IN. MM | 0.004 0.10 | 0.010 0.25 | 0.004 0.10 | 0.010 0.25 | 0.004 0.10 | 0.010 0.25 |
| A2 IN. MM | 0.048 1.24 | 0.062 1.57 | 0.048 1.24 | 0.062 1.57 | 0.048 1.24 | 0.062 1.57 |
| b IN. MM | 0.012 0.30 | 0.020 0.50 | 0.012 0.30 | 0.020 0.50 | 0.012 0.30 | 0.020 0.50 |
| C IN MM | 0.007 0.17 | 0.011 0.28 | 0.007 0.17 | 0.011 0.28 | 0.007 0.17 | 0.011 0.28 |
| D IN. MM | 0.188 4.78 | 0.196 4.98 | 0.337 8.55 | 0.344 8.74 | 0.386 9.80 | 0.393 9.98 |
| e IN. MM | 0.050 BSC 1.27 BSC | | 0.050 BSC 1.27 BSC | | 0.050 BSC 1.27 BSC | |
| E1 IN. MM | 0.150 3.81 | 0.158 4.01 | 0.150 3.81 | 0.158 4.01 | 0.150 3.81 | 0.158 4.01 |
| H IN. MM | 0.230 5.84 | 0.244 6.20 | 0.230 5.84 | 0.244 6.20 | 0.230 5.84 | 0.244 6.20 |
| L IN. MM | 0.016 0.40 | 0.050 0.89 | 0.016 0.40 | 0.050 0.89 | 0.016 0.40 | 0.050 0.89 |
| θ | 0° | 8° | 0° | 8° | 0° | 8° |

8-PIN SOIC (208 MIL)

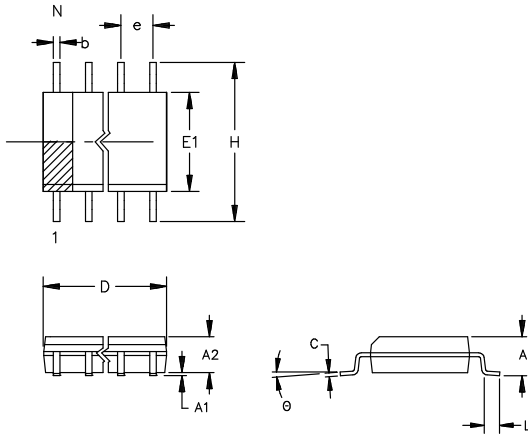


208 Mil
Includes:
DS1202
DS1302
DS1602S
DS1620
DS1625S
DS1651S
DS1652S
DS1669S
DS1821S
DS2404

| PKG | 8-PIN | |
|--------------|-----------------------|---------------|
| | DIM | MIN |
| A IN. MM | 0.072 1.83 | 0.084 2.13 |
| A1 IN. MM | 0.004 0.102 | 0.010 0.25 |
| A2 IN. MM | 0.070 1.78 | 0.080 2.03 |
| b IN. MM | 0.013 0.33 | 0.020 0.51 |
| C IN. MM | 0.006 0.15 | 0.010 0.25 |
| D IN. MM | 0.203 5.16 | 0.215 5.46 |
| e IN MM | 0.050 BSC 1.27 BSC | |
| E1 IN MM | 0.203 5.16 | 0.213 5.41 |
| H IN. MM | 0.302 7.67 | 0.318 8.07 |
| L IN. MM | 0.019 0.48 | 0.030 0.76 |
| Θ | 0° | 8° |

MECHANICAL DRAWINGS

16-, 20-, 24-, 28-PIN SOIC (300 MIL)



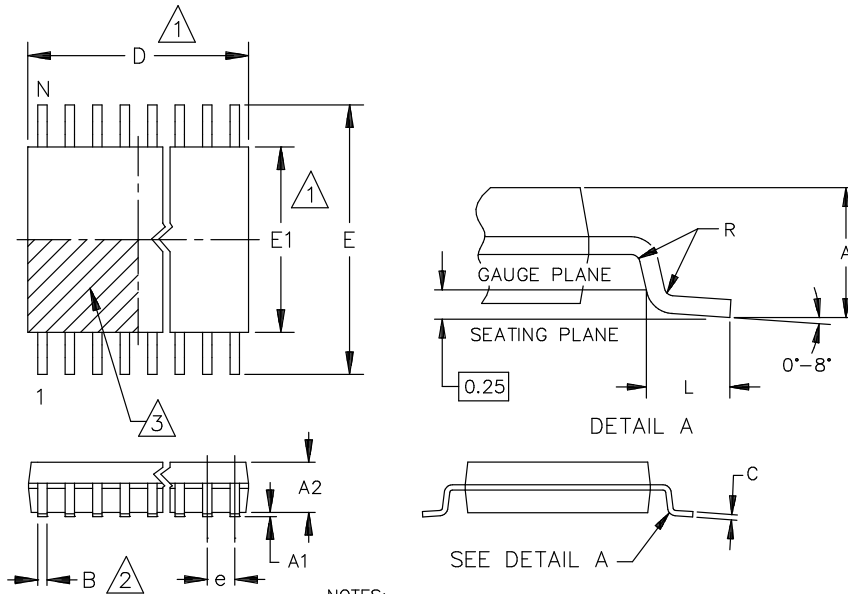
Includes:

| | | |
|------------|-----------|----------|
| DS1000S | DS1227S | DS1360S |
| DS1005S | DS1231S | DS1380S |
| DS1007S | DS1228S | DS1609S |
| DS1010S | DS1229S | DS1610S |
| DS1013S | DS1232S | DS1620 |
| DS1020S | DS1232LPS | DS1632S |
| DS1021S | DS1234S | DS1640S |
| DS1045S | DS1236S | DS1653S |
| DS1200S | DS1237S | DS1710S |
| DS1205S | DS1238S | DS2107AS |
| DS1206 | DS1239S | DS2107S |
| DS1209S-B1 | DS1259S | DS2175S |
| DS1210S | DS1267S | DS2186S |
| DS1211S | DS12885S | DS2187S |
| DS1215S | DS1336S | DS2188S |
| DS1221S | DS1359S | |
| DS1222S | | |

The chamfer on the body is optional. If it is not present, a terminal 1 identifier must be positioned so that 1/2 or more of its area is contained in the hatched zone.

| PKG | 16-PIN | | 20-PIN | | 24-PIN | | 28-PIN | |
|--------------|-----------------------|----------------|----------------|----------------|-----------------------|----------------|----------------|----------------|
| DIM | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX |
| A IN. MM | 0.094 2.38 | 0.105 2.68 | 0.094 2.38 | 0.105 2.68 | 0.094 2.38 | 0.105 2.68 | 0.094 2.39 | 0.105 2.67 |
| A1 IN. MM | 0.004 0.102 | 0.012 0.30 | 0.004 0.102 | 0.012 0.30 | 0.004 0.102 | 0.012 0.30 | 0.004 0.102 | 0.012 0.30 |
| A2 IN. MM | 0.089 2.26 | 0.095 2.41 | 0.089 2.26 | 0.095 2.41 | 0.089 2.26 | 0.095 2.41 | 0.089 2.26 | 0.095 2.41 |
| b IN. MM | 0.013 0.33 | 0.020 0.51 | 0.013 0.33 | 0.020 0.51 | 0.013 0.33 | 0.020 0.51 | 0.013 0.33 | 0.020 0.51 |
| C IN. MM | 0.009 0.229 | 0.013 0.33 | 0.009 0.229 | 0.013 0.33 | 0.009 0.229 | 0.013 0.33 | 0.009 0.229 | 0.013 0.33 |
| D IN. MM | 0.398 10.11 | 0.412 10.46 | 0.498 12.65 | 0.511 12.99 | 0.598 15.19 | 0.612 15.54 | 0.698 17.73 | 0.712 18.08 |
| e IN. MM | 0.050 BSC 1.27 BSC | | | | 0.050 BSC 1.27 BSC | | | |
| E1 IN. MM | 0.290 7.37 | 0.300 7.62 | 0.290 7.37 | 0.300 7.62 | 0.290 7.37 | 0.300 7.62 | 0.290 7.37 | 0.300 7.62 |
| H IN. MM | 0.398 10.11 | 0.416 10.57 | 0.398 10.11 | 0.416 10.57 | 0.398 10.11 | 0.416 10.57 | 0.398 10.11 | 0.416 10.57 |
| L IN. MM | 0.016 0.40 | 0.040 1.02 | 0.016 0.406 | 0.040 1.20 | 0.016 0.40 | 0.040 1.02 | 0.016 0.40 | 0.040 1.02 |
| θ | 0° | 8° | 0° | 8° | 0° | 8° | 0° | 8° |

SSOP PACKAGE



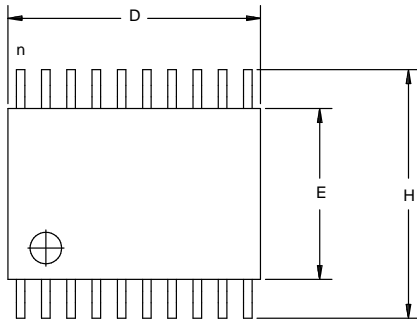
NOTES:

- 1. DIMENSIONS D & E1 DO NOT INCLUDE MOLD FLASH OR PROTRUSIONS, BUT DO INCLUDE MOLD MISMATCH AND ARE MEASURED AT THE PARTING LINE; MOLD FLASH OR PROTRUSION SHALL NOT EXCEED 0.20 MM PER SIDE.
- 2. DIMENSION B DOES NOT INCLUDE DAMBAR PROTRUSIONS. DAMBAR PROTRUSION TO BE 0.13 MM TOTAL IN EXCESS OF B AT MAXIMUM MATERIAL CONDITION.
- 3. VISUAL INDEX FEATURE WITHIN CROSSHATCHED AREA.

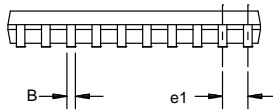
| PKG | 14/16-PIN | | 20-PIN | | 24-PIN | | 28-PIN | |
|-----|-----------|------|----------|------|----------|------|----------|-------|
| | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX |
| A | - | 2.00 | - | 2.00 | - | 2.00 | - | 2.00 |
| A1 | 0.05 | 0.25 | 0.05 | 0.25 | 0.05 | 0.25 | 0.05 | 0.25 |
| A2 | 1.65 | 1.85 | 1.65 | 1.85 | 1.65 | 1.85 | 1.65 | 1.85 |
| B | 0.22 | 0.38 | 0.22 | 0.38 | 0.22 | 0.38 | 0.22 | 0.38 |
| C | 0.09 | 0.21 | 0.09 | 0.21 | 0.09 | 0.21 | 0.09 | 0.21 |
| D | 5.90 | 6.50 | 6.90 | 7.50 | 7.90 | 8.50 | 9.90 | 10.50 |
| E | 7.40 | 8.20 | 7.40 | 8.20 | 7.40 | 8.20 | 7.40 | 8.20 |
| E1 | 5.00 | 5.60 | 5.00 | 5.60 | 5.00 | 5.60 | 5.00 | 5.60 |
| e | 0.65 BSC | | 0.65 BSC | | 0.65 BSC | | 0.65 BSC | |
| L | 0.55 | 0.95 | 0.55 | 0.95 | 0.55 | 0.95 | 0.55 | 0.95 |
| R | 0.09 | - | 0.09 | - | 0.09 | - | 0.09 | - |

MECHANICAL DRAWINGS

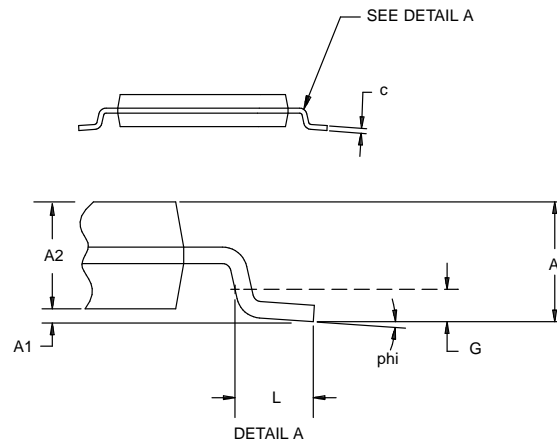
-14, -20-PIN TSSOP



1

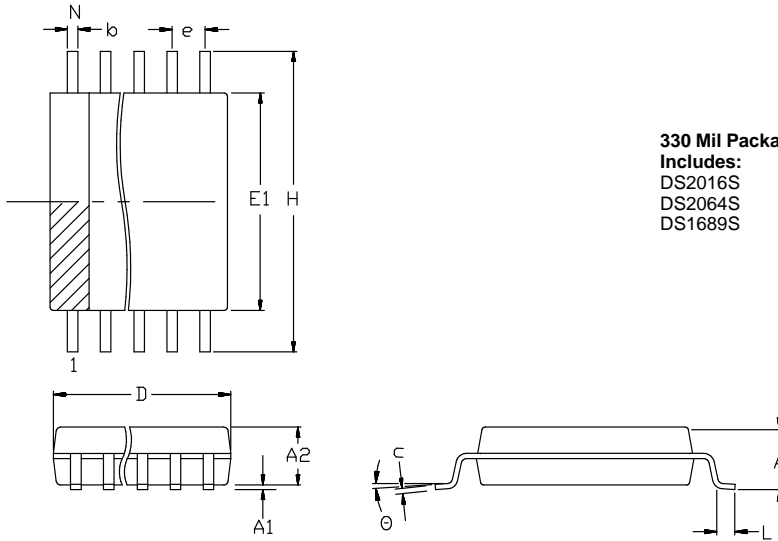


- | | |
|---------------|---------------|
| 14-PIN | 20-PIN |
| DS1801 | DS1033E |
| DS1803 | DS1035E |
| DS1807 | DS1802 |
| | DS1867 |
| | DS2430 |
| | DS1267 |
| | DS1806 |
| | DS1800 |



| DIM | 14-PIN | | 20-PIN | |
|-------|----------|------|----------|------|
| | MIN | MAX | MIN | MAX |
| A MM | - | 1.10 | - | 1.10 |
| A1 MM | 0.05 | - | 0.05 | - |
| A2 MM | 0.75 | 1.05 | 0.75 | 1.05 |
| C MM | 0.09 | 0.18 | 0.09 | 0.18 |
| L MM | 0.50 | 0.70 | 0.50 | 0.70 |
| e1 MM | 0.65 BSC | | 0.65 BSC | |
| B MM | 0.18 | 0.30 | 0.18 | 0.30 |
| D MM | 4.90 | 5.10 | 6.40 | 6.90 |
| E MM | 4.40 NOM | | 4.40 NOM | |
| G MM | 0.25 REF | | 0.25 REF | |
| H MM | 6.25 | 6.55 | 6.25 | 6.55 |
| phi | 0° | 8° | 0° | 8° |
| n | 14 | | 20 | |

24- AND 28-PIN 330 MIL SOIC



330 Mil Package Includes:
 DS2016S
 DS2064S
 DS1689S

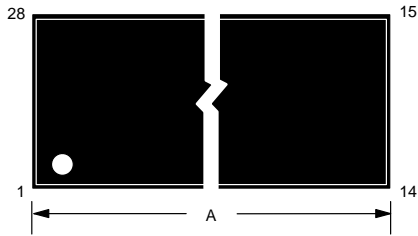
350 Mil Package Includes:
 DS1385S
 DS1395S
 DS1485S
 DS1585S
 DS1495S

The chamfer on the body is optional. If it is not present, a terminal 1 identifier must be positioned so that 1/2 or more of its area is contained in the hatched zone.

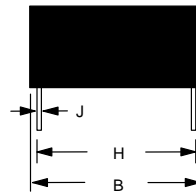
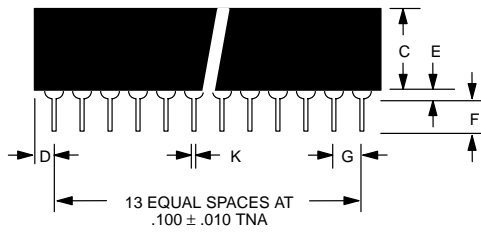
| PKG | 330 MIL BODY | | | | 350 MIL BODY | |
|--------------|-------------------|---------------|------------------|---------------|-------------------|----------------|
| | 24-PIN | | 28-PIN | | 28-PIN | |
| DIM | MIN | MAX | MIN | MAX | MIN | MAX |
| A IN. MM | 0.106 TYP 2.7 | | | | 0.090 2.29 | 0.124 3.15 |
| A1 IN. MM | .007 .19 | .008 .21 | 0.007 0.19 | 0.008 0.21 | 0.002 0.051 | 0.014 0.356 |
| A2 IN. MM | .0925 2.35 | .104 2.65 | 0.093 2.35 | 0.104 2.65 | 0.086 2.18 | 0.110 2.79 |
| b IN. MM | .012 .30 | 0.20 0.50 | 0.012 0.30 | 0.020 0.50 | 0.014 0.36 | 0.020 0.51 |
| c IN. MM | .004 .10 | .008 0.20 | 0.004 0.10 | 0.008 0.20 | 0.006 0.152 | 0.013 0.32 |
| D IN. MM | .594 15.10 | .602 15.30 | 0.697 17.7 | 0.705 17.9 | 0.706 17.93 | 0.728 18.49 |
| e IN. MM | 0.050 BSC 1.27 | | | | 0.050 BSC 1.27 | |
| E1 IN. MM | .327 8.30 | .335 8.50 | 0.327 8.3 | 0.335 8.5 | 0.338 8.58 | 0.350 8.89 |
| H IN. MM | 0.452 11.5 | .477 12.1 | 0.452 11.5 | 0.477 12.1 | 0.460 11.68 | 0.480 12.19 |
| L IN. MM | 0.039 TYP 1.0 | | 0.039 TYP 1.0 | | 0.020 0.51 | 0.050 1.27 |
| θ | 0° | 8° | 0° | 8° | 0° | 8° |

MECHANICAL DRAWINGS

28-PIN (720 MIL) MODULE

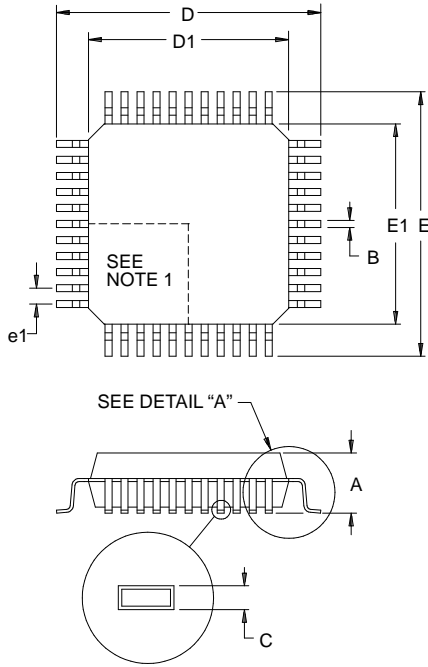


Includes:
DS1687



| PKG | 28-PIN | |
|-------------|----------------|----------------|
| DIM | MIN | MAX |
| A IN. MM | 1.520 38.61 | 1.540 39.12 |
| B IN. MM | 0.695 17.65 | 0.720 18.29 |
| C IN. MM | 0.350 8.89 | 0.375 9.52 |
| D IN. MM | 0.100 2.54 | 0.130 3.30 |
| E IN. MM | 0.015 0.38 | 0.030 0.76 |
| F IN. MM | 0.110 2.79 | 0.140 3.56 |
| G IN. MM | 0.090 2.29 | 0.110 2.79 |
| H IN. MM | 0.590 14.99 | 0.630 16.00 |
| J IN. MM | 0.008 0.20 | 0.012 0.30 |
| K IN. MM | 0.015 0.38 | 0.021 0.53 |

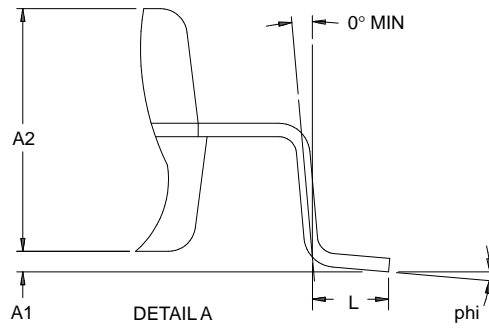
44-PIN METRIC QUAD FLAT PACK (PRELIMINARY)



NOTES:
 1. DETAILS OF PIN 1 IDENTIFIER ARE OPTIONAL BUT MUST BE LOCATED WITHIN THE ZONE INDICATED.

10 X 10 Body
Includes:
 DS1384Q
 DS80C320
 DS5001

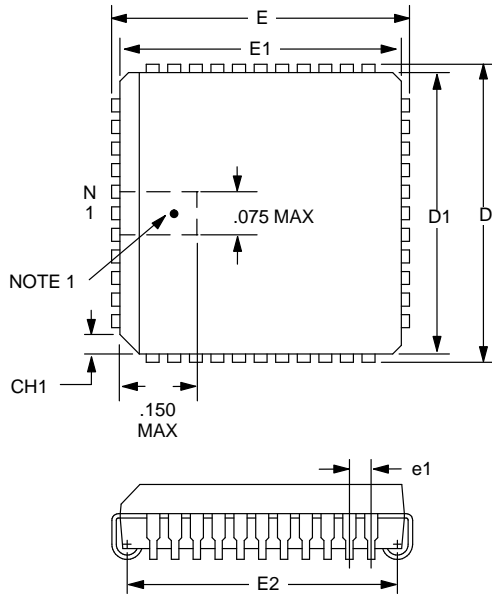
14 X 14 Body
Includes:
 DS1280FP-44



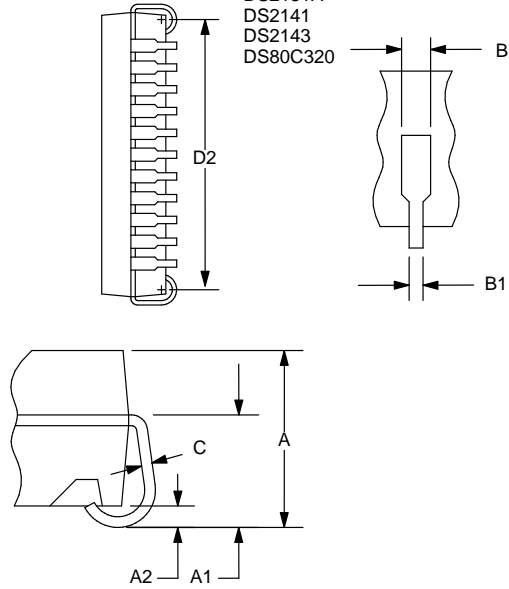
| PKG | 10 X 10 X 2 BODY | | 14 X 14 BODY | | |
|-------|------------------|-------|--------------|-------|-----|
| | DIM | MIN | MAX | MIN | MAX |
| A MM | - | 2.45 | 0.50 | 3.10 | |
| A1 MM | 0.10 | - | 0.05 | - | |
| B MM | 0.30 | 0.45 | 0.20 | 0.50 | |
| C MM | 0.13 | 0.23 | 0.10 | 0.20 | |
| D MM | 13.65 | 14.30 | 17.20 | 18.00 | |
| E MM | 13.65 | 14.30 | 17.20 | 18.00 | |
| D1 MM | 9.90 | 10.10 | 13.80 | 14.20 | |
| E1 MM | 9.90 | 10.10 | 13.80 | 14.20 | |
| L MM | 0.63 | 1.03 | 0.50 | 1.10 | |
| e1 MM | 0.80 BSC | | 1.00 BSC | | |
| phi | 0° | 8° | 0° | 12° | |

MECHANICAL DRAWINGS

44-PIN PLCC



Includes:
 DS2180A
 DS2181A
 DS2141
 DS2143
 DS80C320

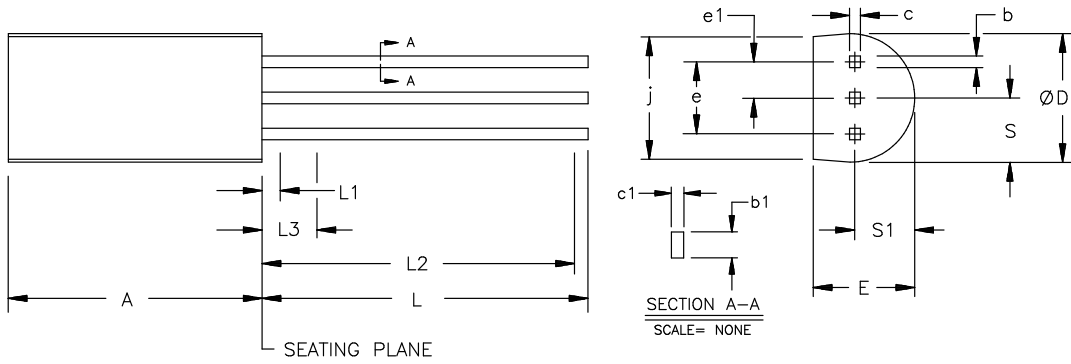


NOTE1: PIN 1 IDENTIFIER TO BE LOCATED IN ZONE INDICATED.

| DIM | INCHES | |
|-----|-----------|-------|
| | MIN | MAX |
| A | 0.165 | 0.180 |
| A1 | 0.090 | 0.120 |
| A2 | 0.020 | - |
| B | 0.026 | 0.033 |
| B1 | 0.013 | 0.021 |
| C | 0.009 | 0.012 |
| CH1 | 0.042 | 0.048 |
| D | 0.685 | 0.695 |
| D1 | 0.650 | 0.656 |
| D2 | 0.590 | 0.630 |
| E | 0.685 | 0.695 |
| E1 | 0.650 | 0.656 |
| E2 | 0.590 | 0.630 |
| e1 | 0.050 BSC | |

PR35 PACKAGE

Includes:
DS1820
DS2506



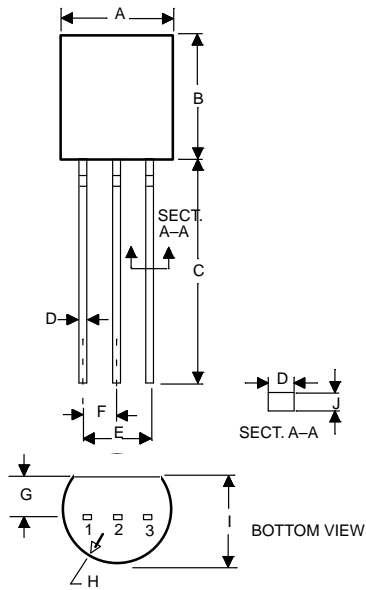
| PKG | PR35 | | | |
|--------------|----------------|----------------|---------------|------|
| DIM | MIN | TYP | MAX | NOTE |
| A IN. MM | 0.348 8.84 | 0.350 8.89 | 0.353 8.97 | |
| b IN. MM | 0.015 0.38 | - | 0.022 0.56 | |
| b1 IN. MM | 0.015 0.38 | - | 0.018 0.46 | 2 |
| c IN. MM | 0.014 0.36 | - | 0.020 0.51 | |
| c1 IN. MM | 0.014 0.36 | - | 0.016 0.41 | 2 |
| D IN. MM | 0.178 4.52 | 0.180 4.57 | 0.183 4.65 | |
| E IN. MM | 0.135 3.43 | 0.140 3.56 | 0.145 3.68 | |
| e IN. MM | 0.095 2.41 | 0.100 2.54 | 0.105 2.67 | |
| e1 IN. MM | 0.045 1.14 | 0.050 1.27 | 0.055 1.40 | |
| j IN. MM | 0.160 4.06 | - | - | 4 |
| L IN. MM | 0.420 10.67 | - | - | |
| L1 IN. MM | - | - | 0.050 1.27 | 1 |
| L2 IN. MM | 0.250 6.35 | - | - | 2 |
| L3 IN. MM | - | - | 0.100 2.54 | 2 |
| S IN. MM | 0.083 2.11 | 0.090 2.29 | 0.099 2.51 | 3 |
| S1 IN. MM | 0.080 2.03 | 0.0825 2.10 | 0.090 2.29 | 3 |

NOTES:

1. TERMINAL DIMENSIONS ARE UNCONTROLLED WITHIN L1.
2. b1 AND c1 APPLY BETWEEN L3 AND L2.
3. S DIMENSION IS DISTANCE FROM TRUE POSITION CENTERLINE OF THE MIDDLE LEAD POSITION TO THE EXTREMITY OF THE BODY.
4. FLAT INDEX SURFACE FOR MARKING.

MECHANICAL DRAWINGS

TO-92 PACKAGE



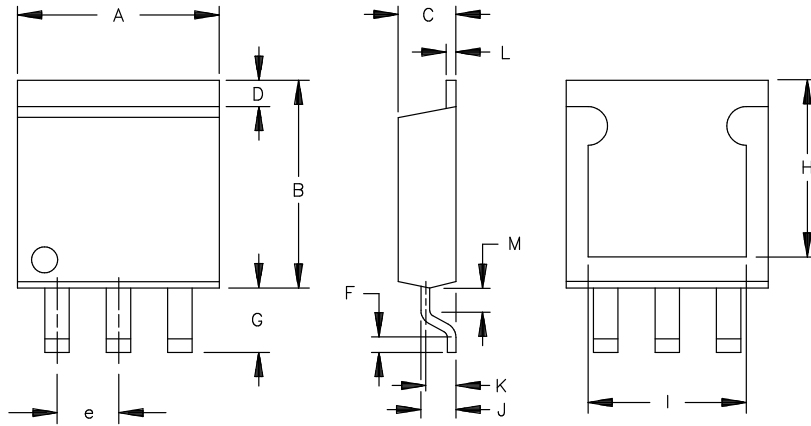
Includes:

- DS1233
- DS1233A
- DS1233D
- DS1833
- DS2223
- DS2224
- DS2401
- DS2405
- DS2430
- DS2502
- DS2505

**Lead binding for
Tape & Reel Order**

| PKG | TO-92 | |
|-------------|-----------------------|----------------|
| DIM | MIN | MAX |
| A IN. MM | 0.175 4.45 | 0.195 4.96 |
| B IN. MM | 0.170 4.32 | 0.195 4.96 |
| C IN. MM | 0.500 12.70 | 0.610 15.49 |
| D IN. MM | 0.016 0.406 | 0.022 0.559 |
| E IN. MM | 0.095 2.41 | 0.105 2.67 |
| F IN. MM | 0.045 1.14 | 0.060 1.52 |
| G IN. MM | 0.45 1.14 | 0.060 1.52 |
| H IN. MM | 0.085 2.16 | 0.095 2.41 |
| I IN. MM | 0.130 3.30 | 0.155 3.94 |
| J IN. MM | 0.014 0.35 | 0.020 0.51 |
| K IN. MM | 0.093 2.36 | 0.115 2.92 |
| L IN. MM | 45° | 60° |
| M IN. MM | 0.118 TYPICAL 3.00 | |

3L D2PAK (TO-220 TABLESS)



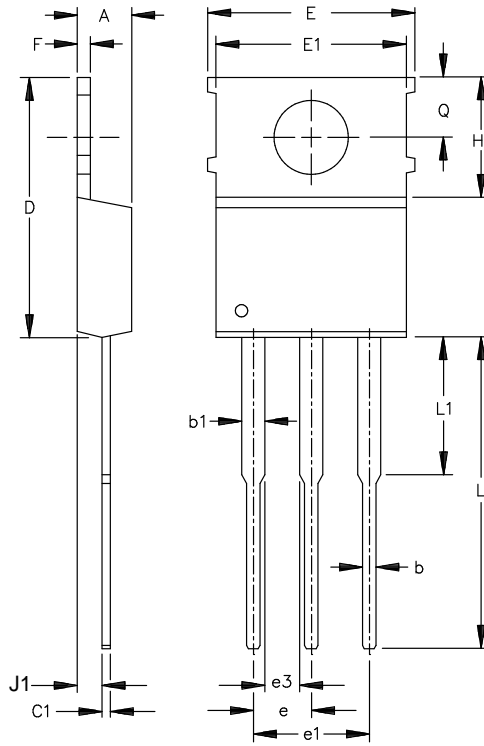
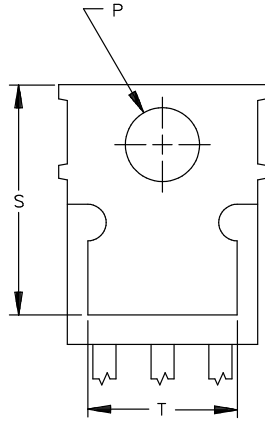
NOTES:

1. Dimensions F and M are measured to the center of radius.
2. All dimensions are shown in inches.

| PKG | TO-220 | | |
|-----|--------|-------|-------|
| | DIM | MIN | NOM |
| A | 0.386 | 0.396 | 0.406 |
| B | 0.410 | 0.420 | 0.430 |
| C | 0.160 | 0.170 | 0.180 |
| D | 0.035 | 0.045 | 0.055 |
| e | 0.095 | 0.105 | 0.115 |
| F | 0.025 | 0.035 | 0.045 |
| G | 0.125 | 0.135 | 0.145 |
| H | 0.265 | 0.275 | 0.285 |
| I | 0.195 | 0.205 | 0.215 |
| J | 0.088 | 0.098 | 0.108 |
| K | 0.080 | 0.090 | 0.100 |
| L | 0.040 | 0.050 | 0.060 |
| M | 0.070 | 0.080 | 0.090 |

MECHANICAL DRAWINGS

3L TO-220



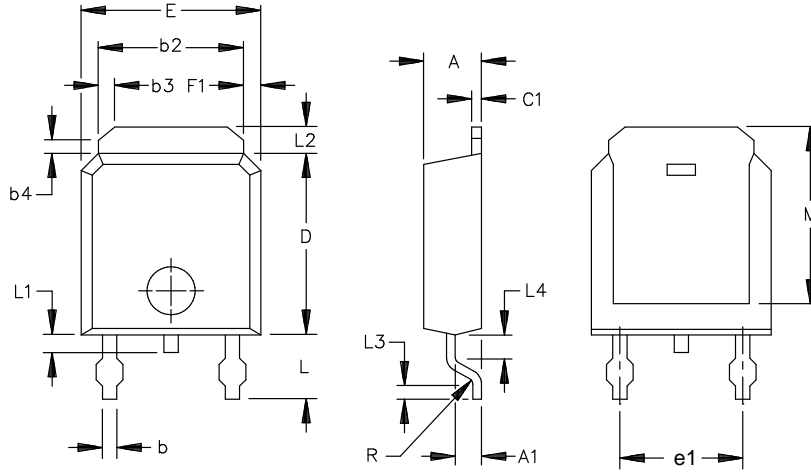
Includes:
DS1633
DS1821T
DS1837

| PKG | TO-220 | | |
|-----|--------|-------|-------|
| | DIM | MIN | NOM |
| A | 0.165 | 0.175 | 0.185 |
| b | 0.024 | 0.032 | 0.040 |
| b1 | 0.042 | 0.050 | 0.058 |
| C1 | 0.012 | 0.015 | 0.018 |
| D | 0.573 | 0.588 | 0.603 |
| E | 0.394 | 0.404 | 0.414 |
| E1 | 0.390 | 0.400 | 0.410 |
| e | 0.090 | 0.100 | 0.110 |
| e1 | 0.190 | 0.200 | 0.210 |
| e3 | 0.045 | 0.050 | 0.055 |
| F | 0.045 | 0.050 | 0.055 |
| H1 | 0.236 | 0.248 | 0.260 |
| J1 | 0.095 | 0.105 | 0.115 |
| L | 0.535 | 0.545 | 0.555 |
| L1 | 0.220 | 0.230 | 0.240 |
| P | 0.146 | 0.151 | 0.156 |
| Q | 0.100 | 0.108 | 0.116 |
| S | 0.465 | 0.475 | 0.485 |
| T | 0.195 | 0.205 | 0.215 |

All dimensions are shown in inches.

3L DPAK (TO-252)

Includes:
DS1837



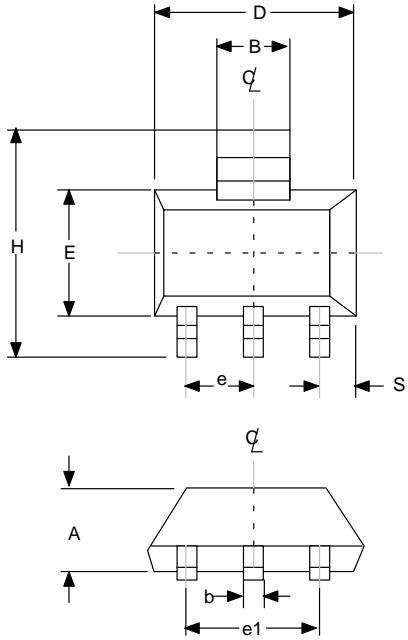
| PKG | TO-252 | | |
|-----|--------|-------|-------|
| DIM | MIN | NOM | MAX |
| A | 0.080 | 0.090 | 0.100 |
| A1 | 0.035 | 0.040 | 0.045 |
| b | 0.025 | 0.030 | 0.035 |
| b2 | 0.205 | 0.210 | 0.215 |
| b3 | 0.030 | 0.035 | 0.040 |
| b4 | 0.020 | 0.025 | 0.030 |
| C1 | 0.018 | 0.020 | 0.023 |
| D | 0.230 | 0.240 | 0.250 |
| E | 0.250 | 0.260 | 0.270 |
| F1 | 0.020 | 0.025 | 0.030 |
| L | 0.090 | 0.100 | 0.110 |
| L1 | 0.010 | 0.025 | 0.040 |
| L2 | 0.030 | 0.040 | 0.050 |
| L3 | 0.021 | 0.024 | 0.028 |
| L4 | 0.033 | 0.038 | 0.043 |
| M | 0.165 | 0.175 | 0.185 |
| e1 | 0.170 | 0.180 | 0.190 |
| R | 0.008 | 0.010 | 0.012 |

NOTE:

1. Dimensions L3 and L4 are measured to the center of radius.
2. All dimensions are shown in inches.

MECHANICAL DRAWINGS

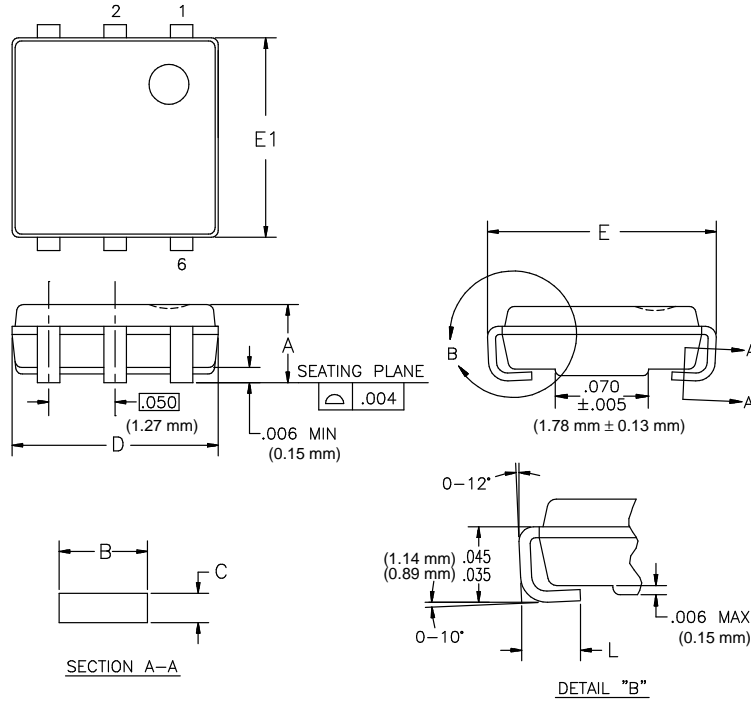
SOT-223 PACKAGE



- Includes:**
 DS1233
 DS1233A
 DS1233D
 DS1833
 DS2223
 DS2224
 DS2225
 DS2401
 DS2405

| PKG | SOT-223 | |
|--------------|------------------------|---------------|
| DIM | MIN | MAX |
| A IN. MM | - | 0.067 1.70 |
| b IN. MM | 0.025 0.64 | 0.033 0.84 |
| B IN. MM | 0.116 2.95 | 0.124 3.15 |
| C IN. MM | 0.009 0.23 | 0.013 0.33 |
| D IN. MM | 0.248 6.30 | 0.263 6.68 |
| e IN. MM | 0.0905 TYP 2.30 TYP | |
| e1 IN. MM | 0.181 TYP 4.60 TYP | |
| E IN. MM | 0.130 3.30 | 0.145 3.68 |
| H IN. MM | 0.264 6.71 | 0.287 7.29 |
| L IN. MM | 0.016 0.41 | 0.036 0.91 |
| S IN. MM | 0.033 0.84 | 0.041 1.04 |
| X | 10° MAX | |
| Y | 10° | 20° |
| Z | 10° | 20° |

6-PIN TSOC (C-LEAD)



Includes:
 DS2401
 DS2405
 DS2407
 DS2430A
 DS2501-UNW
 DS2502
 DS2502-UNW
 DS2505

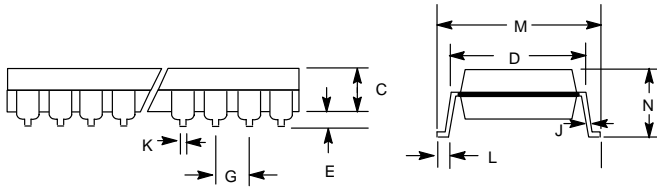
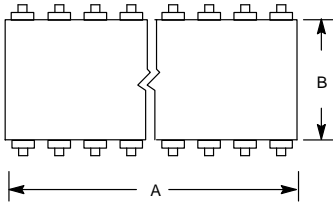
NOTES:

1. CONTROLLING DIMENSIONS: INCHES.
2. DIMENSIONS D AND E1 ARE MEASURED AT THE PARTING LINE AND DO NOT INCLUDE FLASH AND PROTRUSIONS; FLASH AND PROTRUSIONS NOT TO EXCEED .008 (0.20 mm) PER SIDE ON DIM. D AND .011 (0.28 mm) PER SIDE ON DIM. E1.
3. EXCLUSIVE OF DAMBAR PROTRUSION AND INTRUSION; DAMBAR PROTRUSION AND INTRUSION NOT TO BE POSITIONED ON FOOT OR LOWER RADIUS OF LEAD.

| PKG | 6-PIN C-LEAD (TSOC) | | | |
|--------------|---------------------|---------------|---------------|------|
| DIM | MIN | NOM | MAX | NOTE |
| A IN. MM | 0.051 1.30 | 0.055 1.40 | 0.059 1.50 | |
| B IN. MM | 0.016 0.41 | 0.017 0.43 | 0.019 0.48 | 3 |
| C IN. MM | 0.005 0.13 | 0.006 0.15 | 0.008 0.20 | |
| D IN. MM | 0.153 3.89 | 0.155 3.94 | 0.157 3.99 | 2 |
| E IN. MM | 0.163 4.14 | 0.169 4.29 | 0.175 4.45 | |
| E1 IN. MM | 0.144 3.66 | 0.150 3.81 | 0.152 3.86 | 2 |
| L IN. MM | 0.025 0.64 | 0.032 0.81 | 0.039 0.99 | |

MECHANICAL DRAWINGS

8- TO 20-PIN GULLWING (300 MIL)

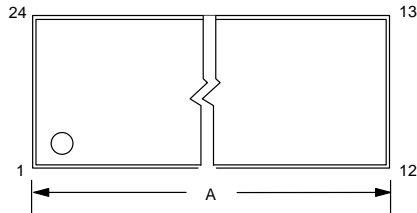


Includes:
 DS1000G
 DS1000H
 DS1003G
 DS1003H
 DS1005G
 DS1005H
 DS1010G
 DS1012H
 DS1013G
 DS1013H
 DS1040H
 DS1044G

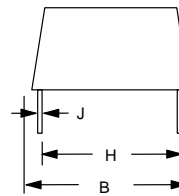
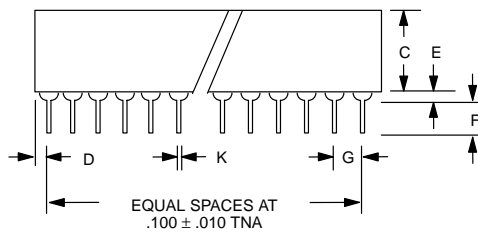
| PKG | 8-PIN | | 14-PIN | | 16-PIN | | 20-PIN | |
|-------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| DIM | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX |
| A IN. MM | 0.345 8.76 | 0.400 10.16 | 0.740 12.19 | 0.780 13.20 | 0.740 18.79 | 0.780 9.81 | 0.960 24.38 | 1.040 26.41 |
| B IN. MM | 0.240 6.10 | 0.260 6.60 | 0.240 6.10 | 0.260 6.60 | 0.240 6.10 | 0.260 6.60 | 0.240 6.10 | 0.260 6.60 |
| C IN. MM | 0.120 3.05 | 0.140 3.56 | 0.120 3.05 | 0.140 3.56 | 0.120 3.05 | 0.140 3.56 | 0.120 3.05 | 0.140 3.56 |
| D IN. MM | 0.300 7.62 | 0.325 8.26 | 0.300 7.62 | 0.325 8.26 | 0.300 7.62 | 0.325 8.26 | 0.300 7.62 | 0.325 8.26 |
| E IN. MM | 0.020 0.51 | 0.040 1.02 | 0.020 0.51 | 0.040 1.02 | 0.020 0.51 | 0.040 1.02 | 0.020 0.51 | 0.040 1.02 |
| G IN. MM | 0.090 2.29 | 0.110 2.79 | 0.090 2.29 | 0.110 2.79 | 0.090 2.29 | 0.110 2.79 | 0.090 2.29 | 0.110 2.79 |
| J IN. MM | 0.008 0.20 | 0.012 0.30 | 0.008 0.20 | 0.012 0.30 | 0.008 0.20 | 0.012 0.30 | 0.008 0.20 | 0.012 0.30 |
| K IN. MM | 0.015 0.38 | 0.021 0.53 | 0.015 0.38 | 0.021 0.53 | 0.015 0.38 | 0.021 0.53 | 0.015 0.38 | 0.021 0.53 |
| L IN. MM | 0.030 0.76 | 0.050 1.27 | 0.030 0.76 | 0.050 1.27 | 0.030 0.76 | 0.050 1.27 | 0.030 0.76 | 0.050 1.27 |
| M IN. MM | 0.370 9.40 | 0.420 10.67 | 0.370 9.40 | 0.420 10.67 | 0.370 9.40 | 0.420 10.67 | 0.370 9.40 | 0.420 10.67 |
| N IN. MM | 0.160 4.06 | 0.180 4.57 | 0.160 4.06 | 0.180 4.57 | 0.160 4.06 | 0.180 4.57 | 0.160 4.06 | 0.180 4.57 |

**16- AND 24- PIN ENCAPSULATED PACKAGE
(FLUSH BOTTOM – 450 MIL.)**

Includes:
DS1290
DS1292



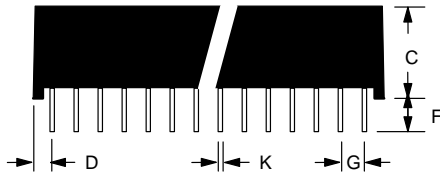
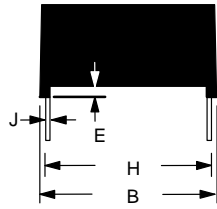
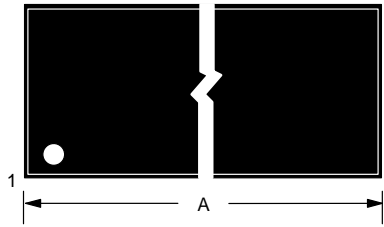
NOTE: On 16-pin package, pins 1 and 16 are missing by design. On 24-pin package, pins 1 and 24 are missing by design.



| PKG | 16-PIN | | 24-PIN | |
|-------------|----------------|----------------|----------------|----------------|
| | MIN | MAX | MIN | MAX |
| A IN. MM | 0.820 20.83 | 0.840 21.34 | 1.310 33.27 | 1.330 33.78 |
| B IN. MM | 0.440 11.18 | 0.460 11.68 | 0.440 11.18 | 0.460 11.68 |
| C IN. MM | 0.330 8.38 | 0.370 9.40 | 0.330 8.38 | 0.370 9.40 |
| D IN. MM | 0.180 4.57 | 0.210 5.33 | 0.215 5.46 | 0.245 6.22 |
| E IN. MM | 0.020 0.51 | 0.040 1.02 | 0.020 0.51 | 0.040 1.02 |
| F IN. MM | 0.110 2.79 | 0.140 3.56 | 0.110 2.79 | 0.140 3.56 |
| G IN. MM | 0.090 2.29 | 0.110 2.79 | 0.090 2.29 | 0.110 2.79 |
| H IN. MM | 0.330 8.38 | 0.380 9.65 | 0.330 8.38 | 0.380 9.65 |
| J IN. MM | 0.008 0.20 | 0.012 0.31 | 0.008 0.20 | 0.012 0.31 |
| K IN. MM | 0.015 0.38 | 0.021 0.53 | 0.015 0.38 | 0.021 0.53 |

MECHANICAL DRAWINGS

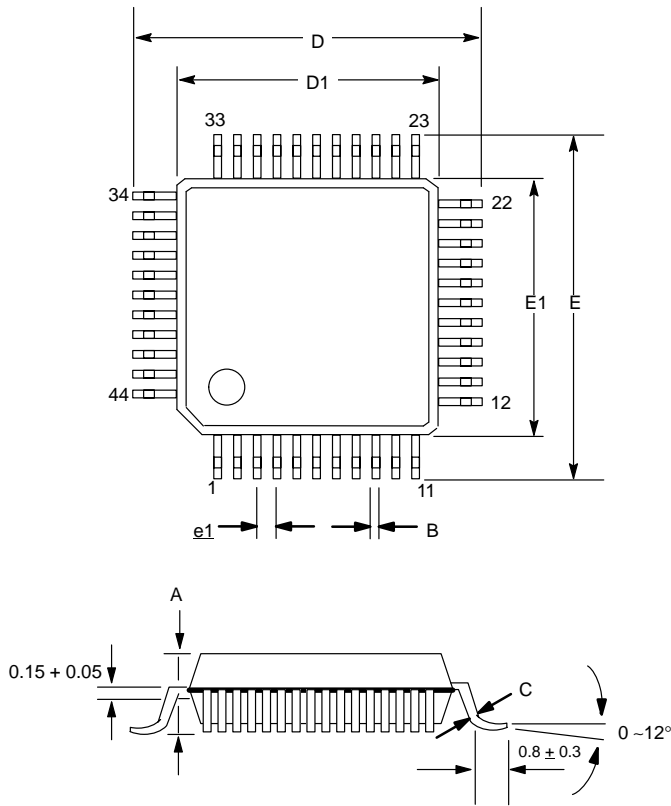
32-PIN NONVOLATILE SRAM (740 MIL)



| PKG | 32-PIN | |
|-------------|----------------|----------------|
| DIM | MIN | MAX |
| A IN. MM | 1.720 43.69 | 1.740 44.20 |
| B IN. MM | 0.720 18.29 | 0.740 18.80 |
| C IN. MM | 0.395 10.03 | 0.415 10.54 |
| D IN. MM | 0.090 2.29 | 0.120 3.05 |
| E IN. MM | 0.017 0.43 | 0.030 0.76 |
| F IN. MM | 0.120 3.05 | 0.160 4.06 |
| G IN. MM | 0.090 2.29 | 0.110 2.79 |
| H IN. MM | 0.590 14.99 | 0.630 16.00 |
| J IN. MM | 0.008 0.20 | 0.012 0.30 |
| K IN. MM | 0.015 0.38 | 0.021 0.53 |

44-PIN QUAD FLAT PACK (PRELIMINARY)

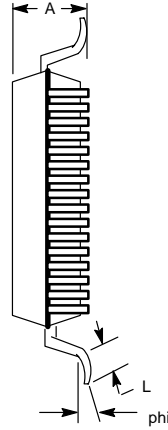
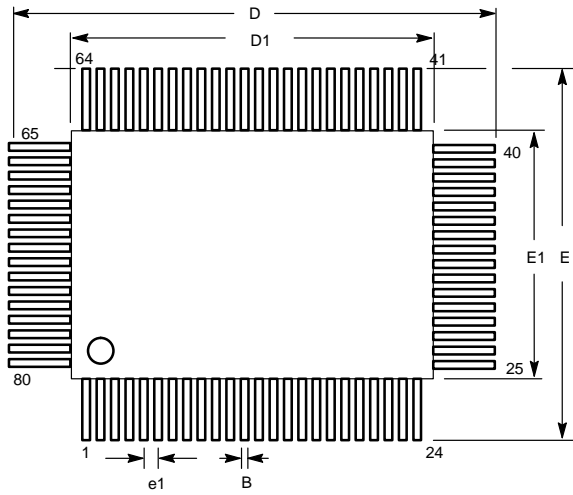
Includes:
DS1280



| PKG | 10 X 10 BODY | | 14 X 14 BODY | |
|-------|--------------|-------|--------------|-------|
| | MIN | MAX | MIN | MAX |
| A MM | - | 2.45 | - | 3.4 |
| B MM | 0.30 | 0.45 | 0.20 | 0.50 |
| C MM | 0.13 | 0.23 | 0.10 | 0.20 |
| D MM | 13.65 | 14.35 | 16.95 | 18.00 |
| E MM | 13.65 | 14.35 | 16.95 | 18.00 |
| D1 MM | 9.90 | 10.10 | 13.80 | 14.20 |
| E1 MM | 9.90 | 10.10 | 13.80 | 14.20 |
| L MM | 0.65 | 0.95 | 0.50 | 1.10 |
| e1 IN | 0.315 | | 0.039 | |
| MM | 0.80 BSC | | 1.00 BSC | |

MECHANICAL DRAWINGS

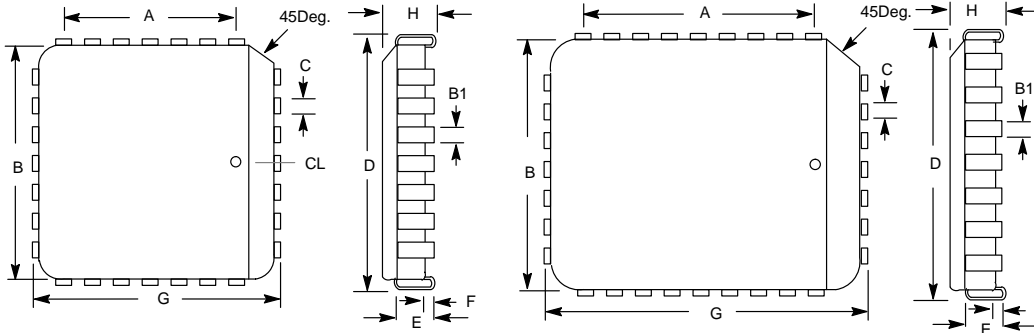
80-PIN QUAD FLAT PACK (14.0 MM X 20.0 MM)



Includes:
DS1280

| PKG | 80-PIN | |
|--------------|-----------------------|----------------|
| DIM | MIN | MAX |
| A IN. MM | 0.11 2.80 | 0.128 3.25 |
| B IN. MM | 0.010 0.25 | 0.020 0.45 |
| e1 IN. MM | 0.031 BSC 0.80 BSC | |
| D1 IN. MM | 0.781 19.85 | 0.793 20.15 |
| E1 IN. MM | 0.545 13.85 | 0.557 14.15 |
| E IN. MM | 0.688 17.50 | 0.720 18.30 |
| D IN. MM | 0.921 23.40 | 0.953 24.20 |
| L IN. MM | 0.025 0.65 | 0.038 0.95 |
| phi | 0° | 8° |

28- AND 32- PIN PLASTIC LEADED CHIP CARRIERS (PLCC)



28- Pin Includes:

- DS1212Q
- DS1284Q
- DS1285Q
- DS12885Q

32-Pin Includes:

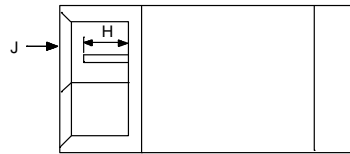
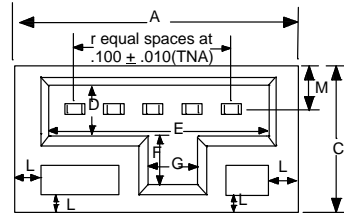
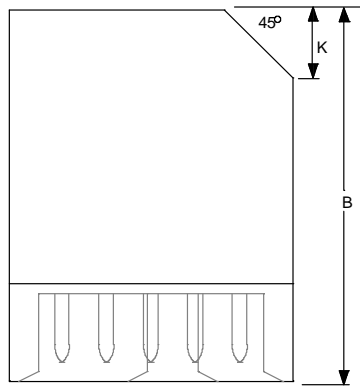
- DS2009R
- DS2010R
- DS2011R
- DS2012R

| PKG | 28-PIN | | 32-PIN | |
|--------------|-------------------|----------------|--------------------|----------------|
| | MIN | MAX | MIN | MAX |
| A IN. MM | 0.300 BSC 7.62 | | 0.400 BSC 10.16 | |
| B IN. MM | 0.445 11.30 | 0.460 11.68 | 0.442 11.30 | 0.460 11.68 |
| B1 IN. MM | 0.013 0.33 | 0.021 0.53 | 0.013 0.33 | 0.021 0.53 |
| C IN. MM | 0.027 0.68 | 0.33 0.84 | 0.027 0.68 | 0.33 0.84 |
| D IN. MM | 0.480 12.19 | 0.500 12.70 | 0.480 12.19 | 0.500 12.70 |
| D2 IN. MM | 0.390 9.91 | 0.430 10.92 | 0.390 9.91 | 0.430 10.92 |
| E IN. MM | 0.090 2.29 | 0.120 3.05 | 0.060 1.52 | 0.095 2.41 |
| E2 IN. MM | 0.390 9.91 | 0.430 10.92 | 0.490 12.45 | 0.530 13.46 |
| F IN. MM | 0.020 0.51 | | 0.015 0.38 | |
| G IN. MM | 0.480 12.19 | 0.500 12.70 | 0.580 14.7 | 0.600 15.24 |
| H IN. MM | 0.165 4.19 | 0.180 4.57 | 0.100 2.54 | 0.140 3.56 |

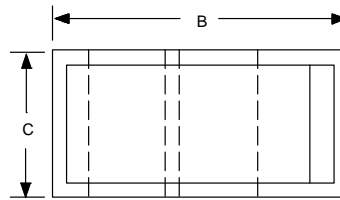
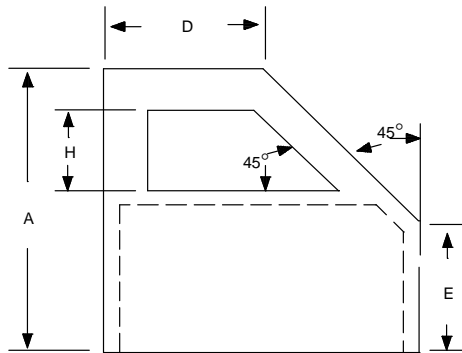
MECHANICAL DRAWINGS

ELECTRONIC KEY/TAG

Includes:
 DS1201
 DS1204V
 DS1205V
 DS1207

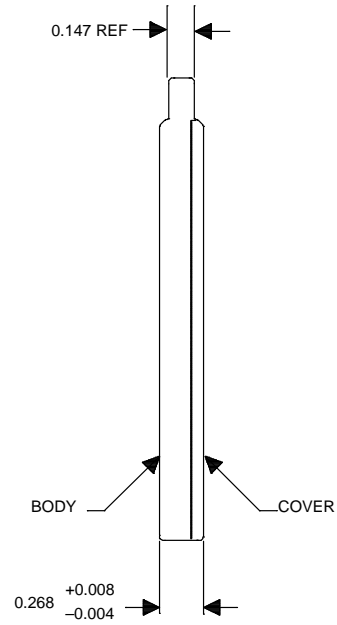
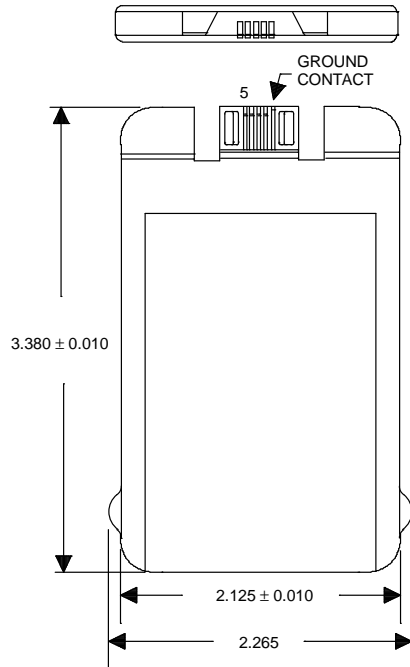


KEY/TAG CAP

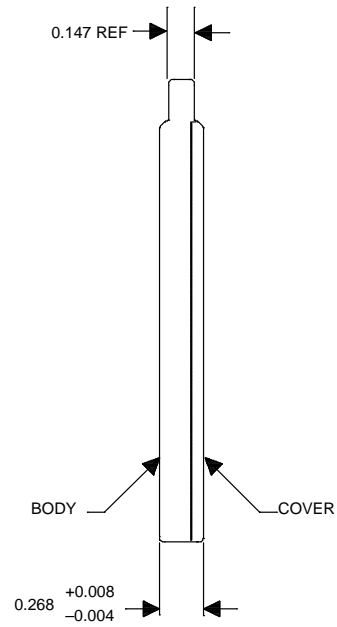
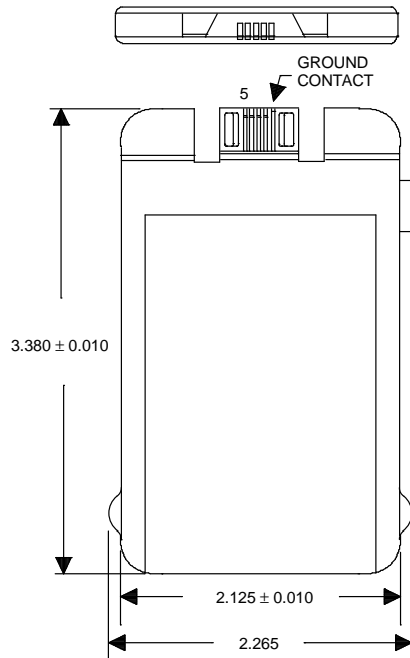


| PKG | ELECTRONIC KEY/TAG | | KEY/TAG CAP | | |
|-------|--------------------|-------|-------------|-------|-----|
| | DIM | MIN | MAX | MIN | MAX |
| A IN. | 0.610 | 0.650 | 0.790 | 0.810 | |
| MM | 15.50 | 16.51 | 20.07 | 20.57 | |
| B IN. | 0.740 | 0.760 | 0.680 | 0.700 | |
| MM | 18.80 | 19.30 | 17.27 | 17.78 | |
| C IN. | 0.310 | 0.355 | 0.405 | 0.425 | |
| MM | 7.87 | 9.02 | 10.29 | 10.80 | |
| D IN. | 0.100 | 0.110 | 0.290 | 0.310 | |
| MM | 2.54 | 2.79 | 7.37 | 7.87 | |
| E IN. | 0.505 | 0.515 | 0.410 | 0.430 | |
| MM | 12.83 | 13.08 | 10.41 | 10.92 | |
| F IN. | 0.100 | 0.110 | | | |
| MM | 2.54 | 2.79 | | | |

CYBERCARD PACKAGE, NON-POLARIZED

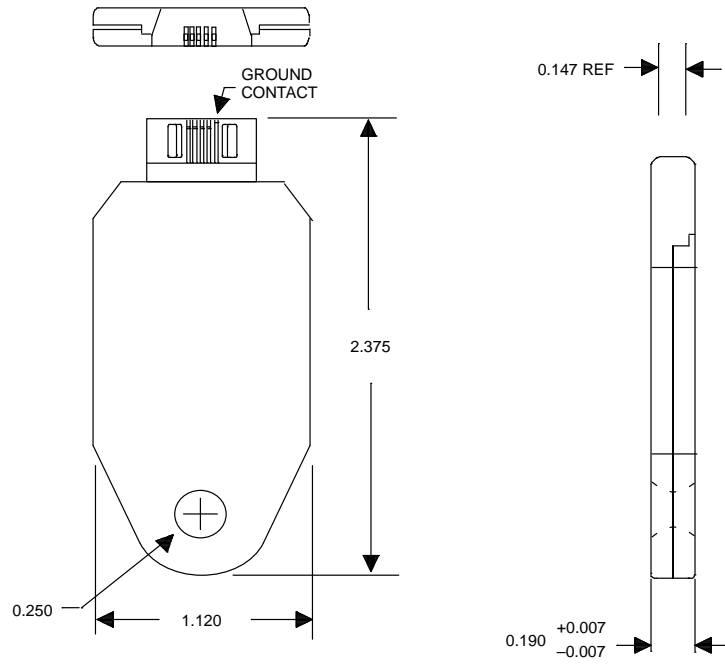


CYBERCARD PACKAGE, POLARIZED

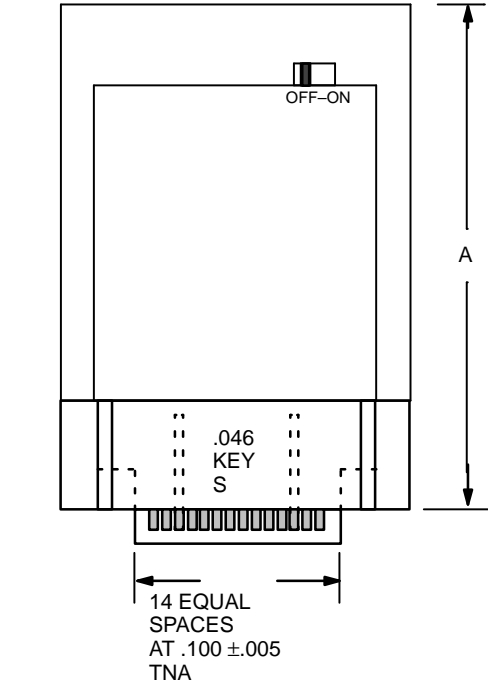


MECHANICAL DRAWINGS

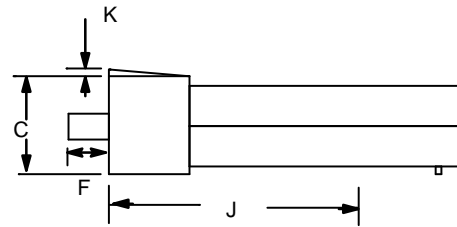
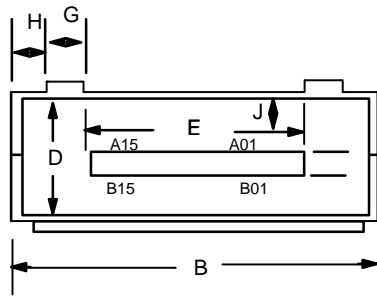
CYBERKEY PACKAGE



NON-VOLATILE READ/WRITE CARTRIDGE

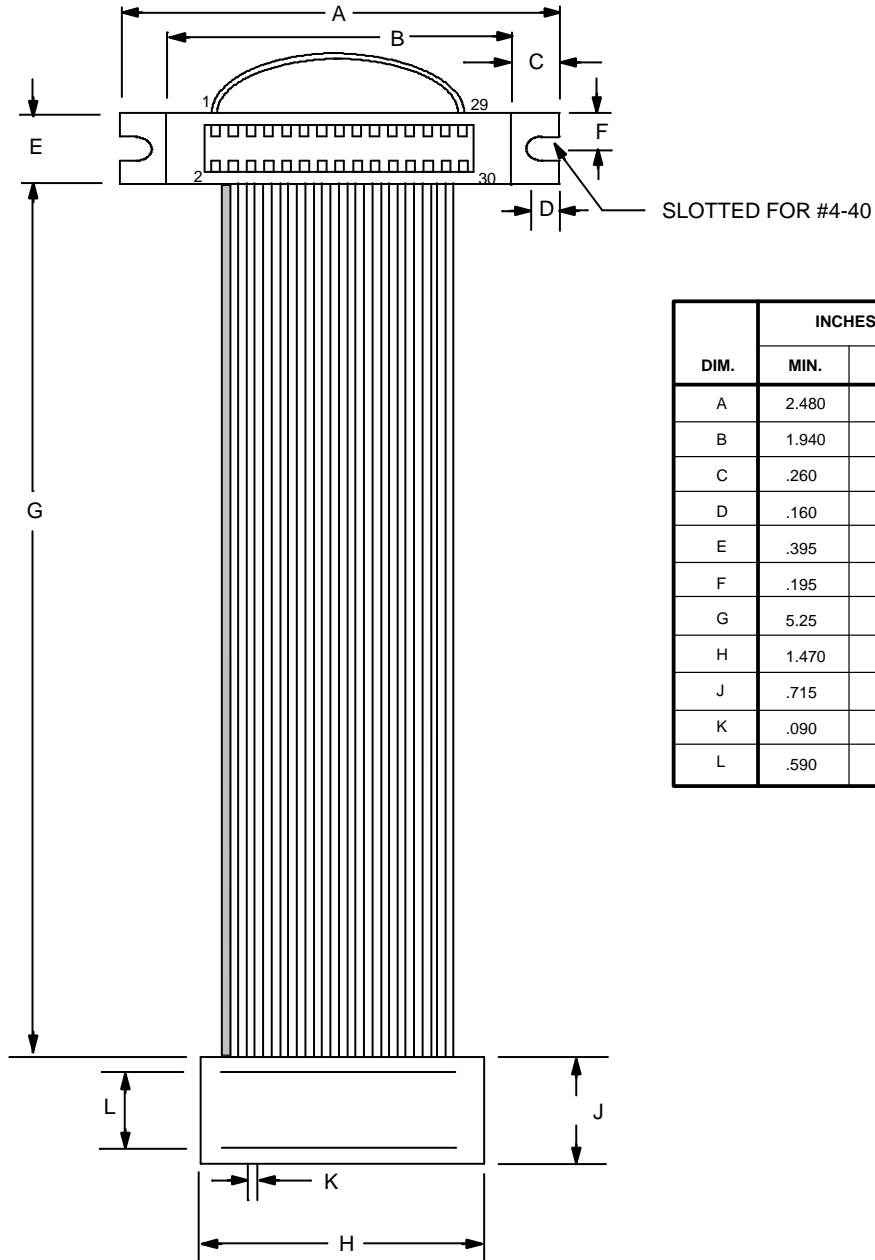


| DIM | INCHES | |
|-----|--------|-------|
| | MIN | MAX |
| A | 3.020 | 3.040 |
| B | 2.275 | 2.295 |
| C | 0.600 | 0.630 |
| D | 0.440 | 0.460 |
| E | 1.590 | 1.607 |
| F | 0.115 | 0.135 |
| G | 0.115 | 0.135 |
| H | 0.140 | 0.160 |
| J | 1.760 | 1.790 |
| K | 0.040 | 0.060 |



MECHANICAL DRAWINGS

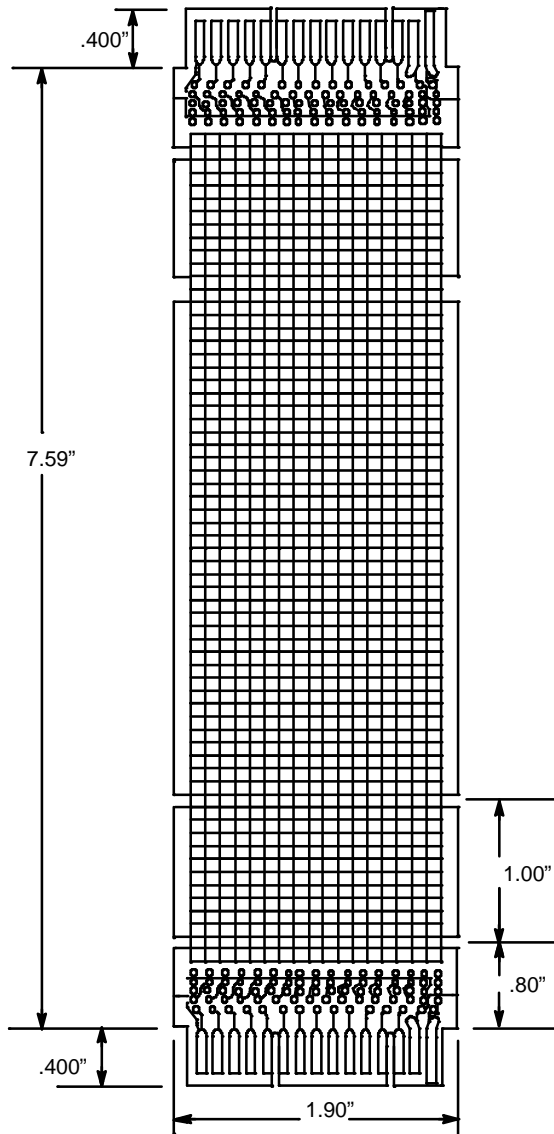
BYTEWIDE CABLE HARNESS



| DIM. | INCHES | |
|------|--------|-------|
| | MIN. | MAX. |
| A | 2.480 | 2.520 |
| B | 1.940 | 1.980 |
| C | .260 | .280 |
| D | .160 | .175 |
| E | .395 | .415 |
| F | .195 | .205 |
| G | 5.25 | 5.65 |
| H | 1.470 | 1.500 |
| J | .715 | .735 |
| K | .090 | .110 |
| L | .590 | .610 |

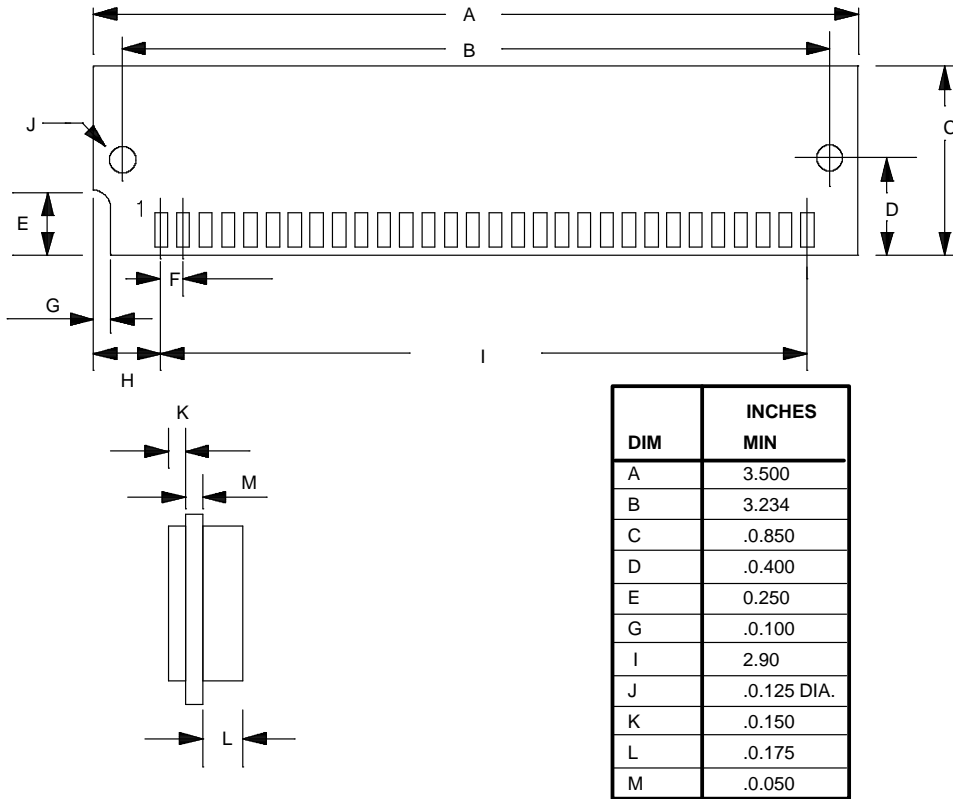
NOTES: COLOR STRIPE INDICATES PIN 1
 END ON 28-PIN PULG.
 DIMENSION L IS CENTER TO CENTER

DS9003
CARTRIDGE PROTO
BOARD

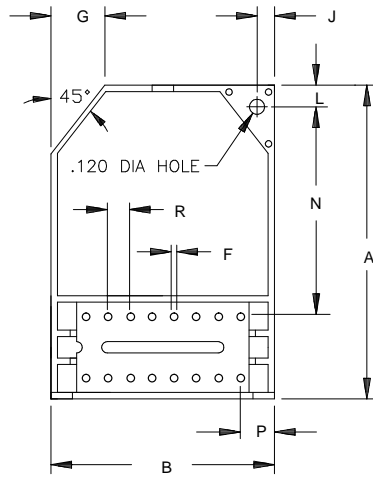


MECHANICAL DRAWINGS

SIPSTIK (30-PIN)

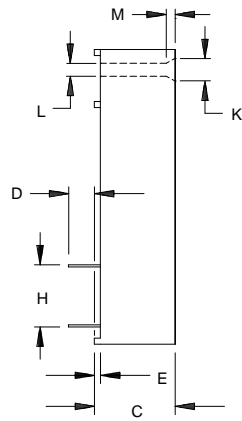


DS1260 SMART BATTERY



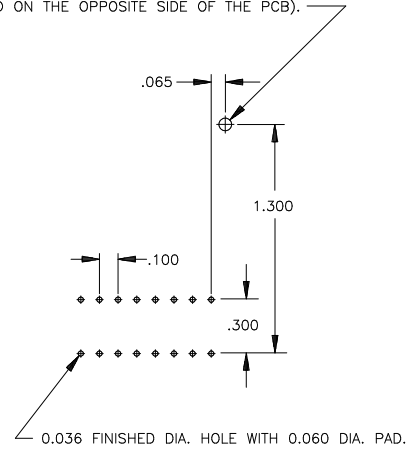
BOTTOM VIEW

| DIM | INCHES | |
|-----|--------|-------|
| | MIN | MAX |
| A | 1.480 | 1.500 |
| B | 1.030 | 1.050 |
| C | 0.390 | 0.415 |
| D | 0.125 | 0.145 |
| E | 0.020 | 0.040 |
| F | 0.016 | 0.020 |
| G | 0.240 | 0.260 |
| H | 0.295 | 0.315 |
| J | 0.090 | 0.110 |
| K | 0.160 | 0.180 |
| L | 0.110 | 0.130 |
| M | 0.035 | 0.065 |
| N | 0.985 | 1.010 |
| P | 0.155 | 0.175 |
| R | 0.095 | 0.105 |



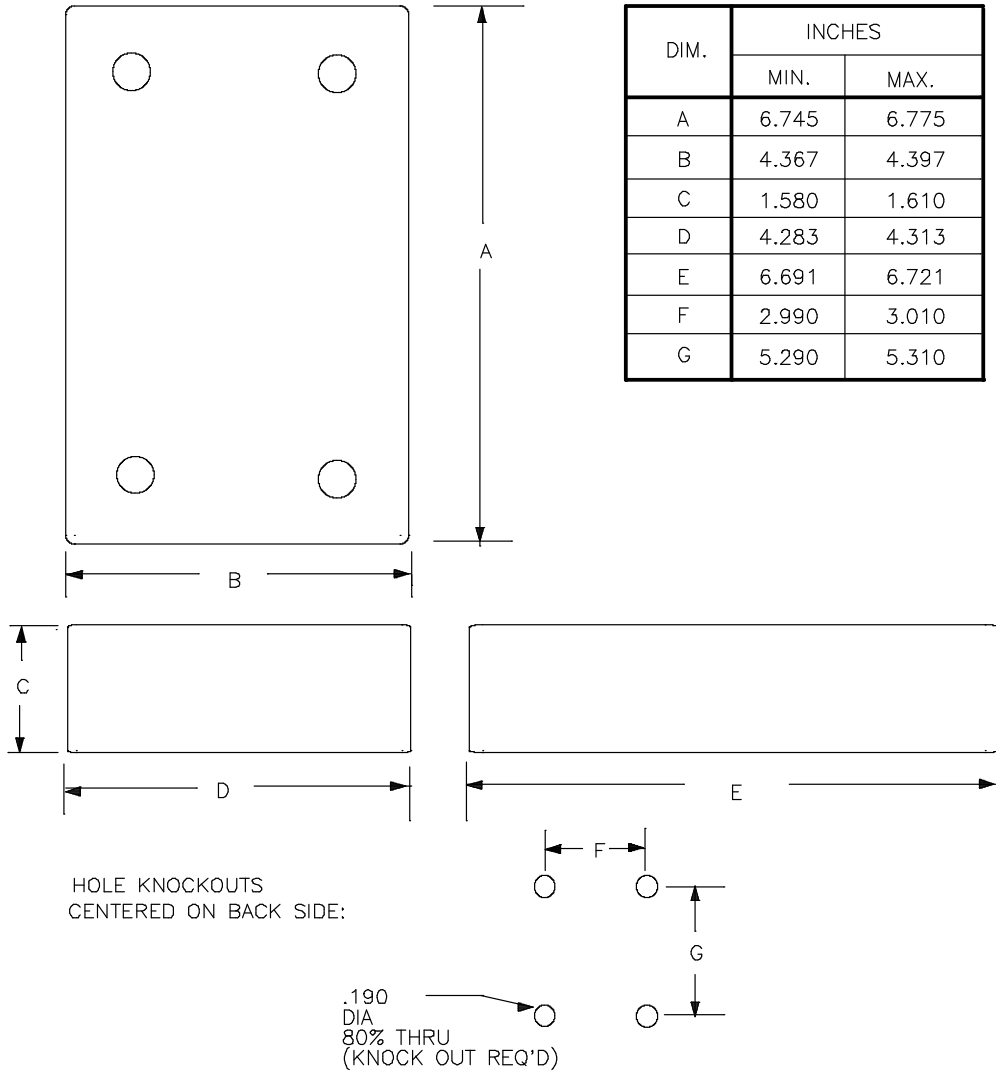
SIDE VIEW

0.150 DIA. HOLE (UNSUPPORTED) (FLAT WASHER SHOULD BE USED ON THE OPPOSITE SIDE OF THE PCB).



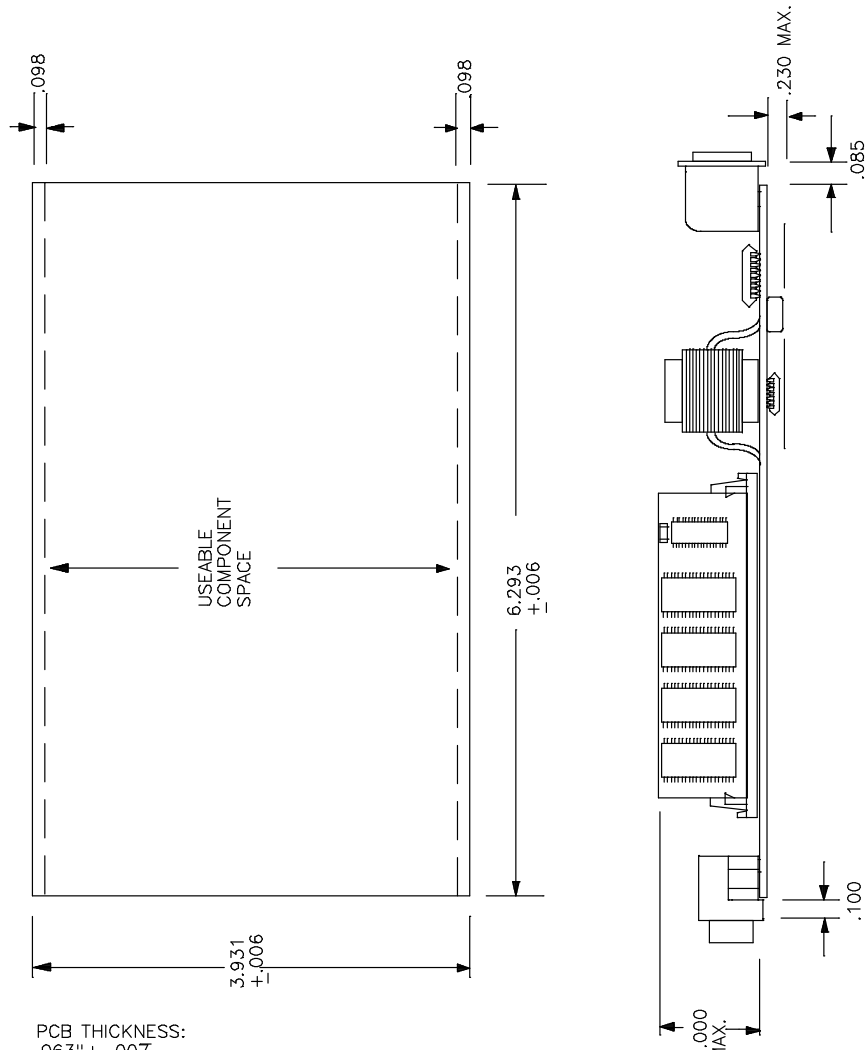
MECHANICAL DRAWINGS

DS9005 EUROCARD ENCLOSURE



DS9006 SIP STIK™ MOTHERBOARD
ALL DIMENSIONS IN INCHES

TYPICAL LAYOUT FOR
DS9005 ENCLOSURE



PCB THICKNESS:
.063" + .007

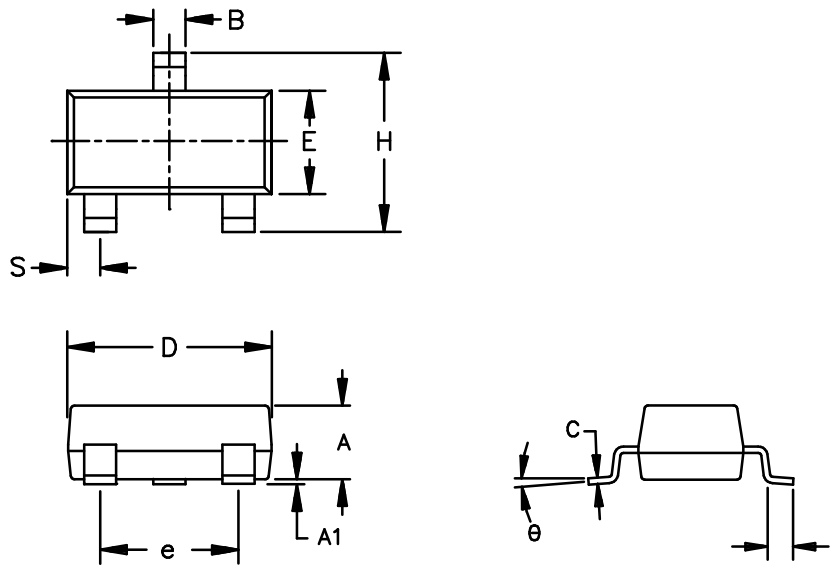
SUGGESTED CONNECTOR

PART NUMBERS:

- RJ45- AMP #520252-4
- 9-PIN D-SUB FEMALE- AMP #745781-1
- DIN-64 POS. FEMALE AMP# 531796-2

MECHANICAL DRAWINGS

SOT 23

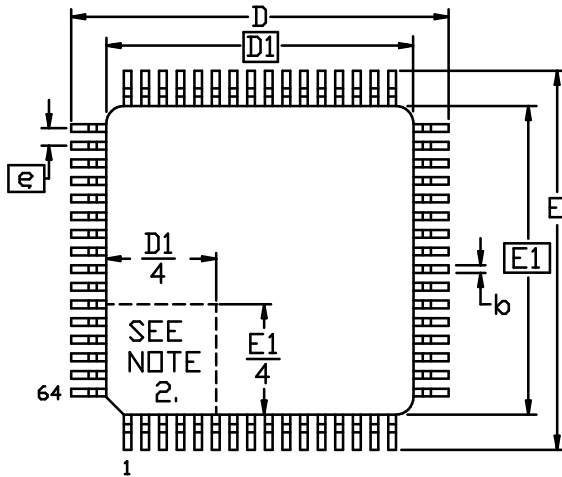


| LTR | INCHES | |
|-----|--------|-------|
| | MIN | MAX |
| A | 0.030 | 0.040 |
| A1 | 0.001 | 0.006 |
| B | 0.015 | 0.022 |
| C | 0.003 | 0.008 |
| D | 0.100 | 0.120 |
| E | 0.040 | 0.060 |
| e | 0.070 | 0.085 |
| H | 0.080 | 0.100 |
| I | 0.005 | 0.015 |
| S | 0.015 | 0.025 |
| θ | 0° | 8° |

- NOTES:
 1. PACKAGE OUTLINE EXCLUSIVE OF ANY MOLD FLASHES DIMENSION.
 2. PACKAGE OUTLINE EXCLUSIVE OF BURR DIMENSION.

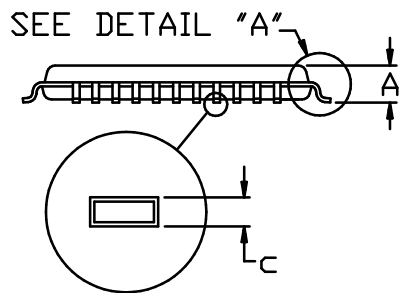
56-G2017-001

64 TOFP

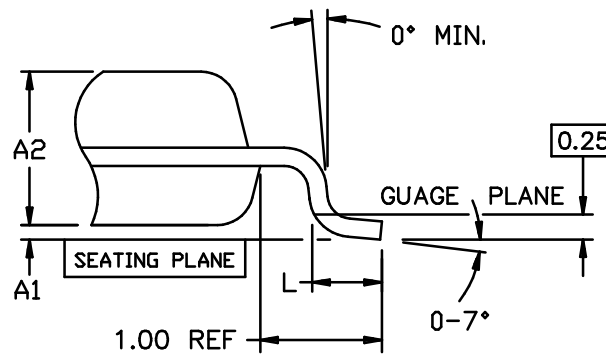


NOTES:

1. DIMENSIONS D1 AND E1 INCLUDE MOLD MISMATCH, BUT DO NOT INCLUDE MOLD PROTRUSION; ALLOWABLE PROTRUSION IS 0.254 MM ON D1 AND E1.
2. DETAILS OF PIN 1 IDENTIFIER ARE OPTIONAL BUT MUST BE LOCATED WITHIN THE ZONE INDICATED.
3. ALLOWABLE DAMBAR PROTRUSION IS 0.08 MM TOTAL IN EXCESS OF THE B DIMENSION AT MAXIMUM MATERIAL CONDITION. PROTRUSION NOT TO BE LOCATED ON LOWER RADIUS OR FOOT OF LEAD.



| DIM | MIN | NOM | MAX |
|-----|-----------|-------|-------|
| A | - | - | 1.20 |
| A1 | 0.05 | 0.10 | 0.15 |
| A2 | 0.95 | 1.00 | 1.05 |
| b | 0.17 | 0.22 | 0.27 |
| c | 0.09 | - | 0.20 |
| D | 11.80 | 12.00 | 12.20 |
| D1 | 10.00 BSC | | |
| E | 11.80 | 12.00 | 12.20 |
| E1 | 10.00 BSC | | |
| e | 0.50 BSC | | |
| L | 0.45 | 0.60 | 0.75 |



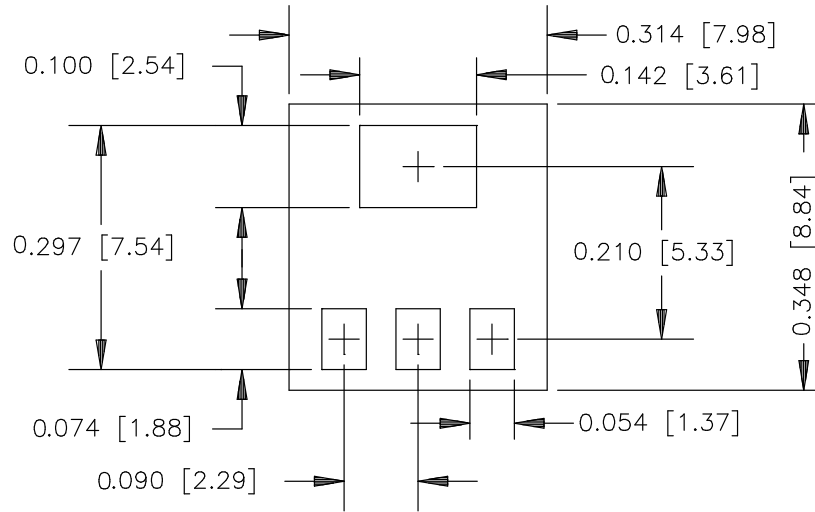
DETAIL A

DIMENSIONS ARE IN MILLIMETERS

56-G4013-001

MECHANICAL DRAWINGS

SOT-223 LAND PATTERN
INCHES [MM]



6-LEAD TSOC LAND PATTERN
INCHES [MM]

