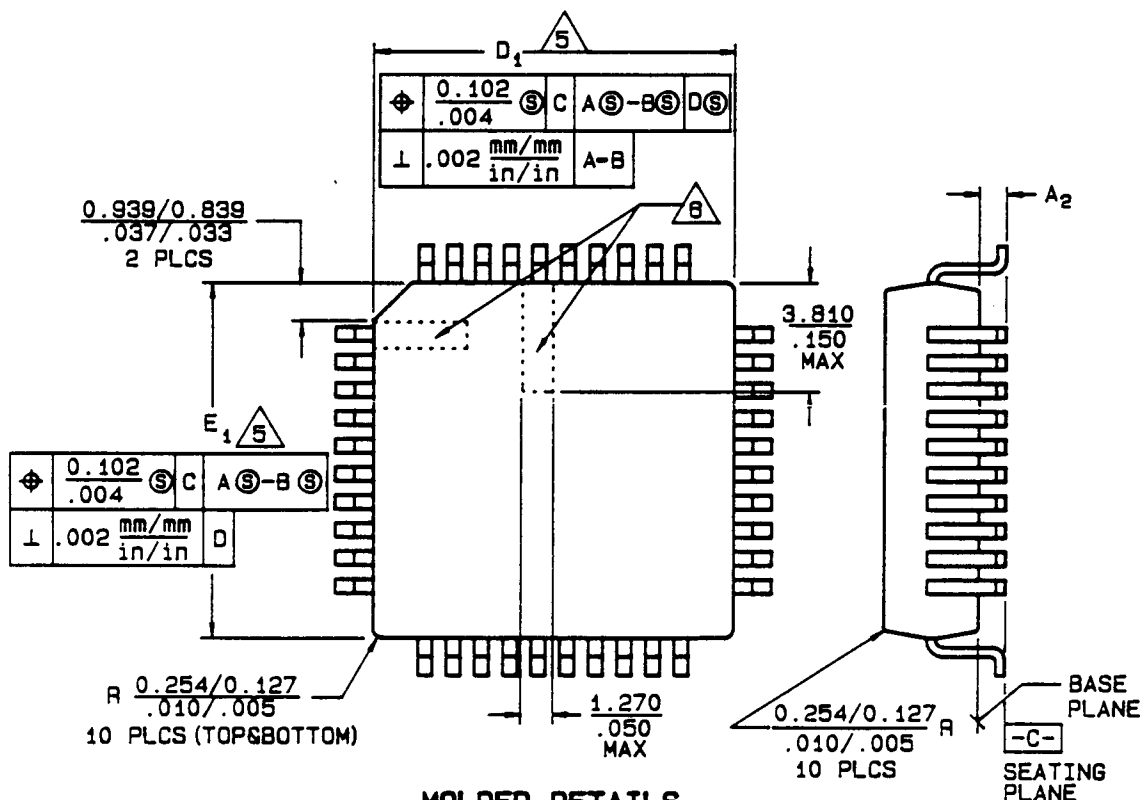


PRINCIPLE DIMENSIONS & DATUMS

FIGURE 1



MOLDED DETAILS

FIGURE 2

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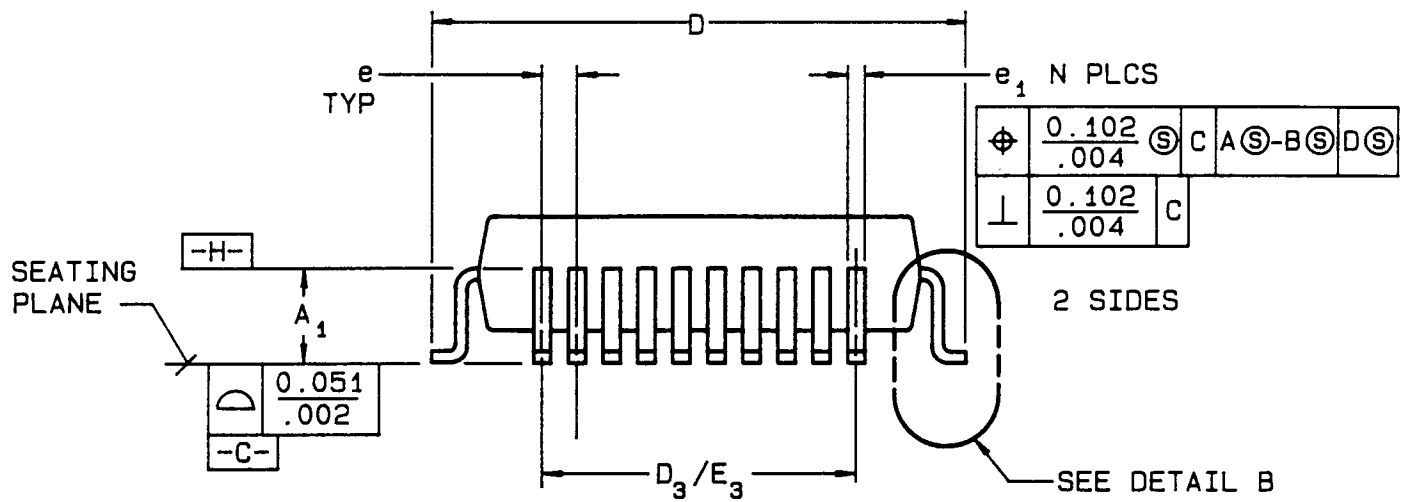
TITLE: PLASTIC THIN LEAD
PACKAGE FAMILY,
SQUARE (GULLWING)

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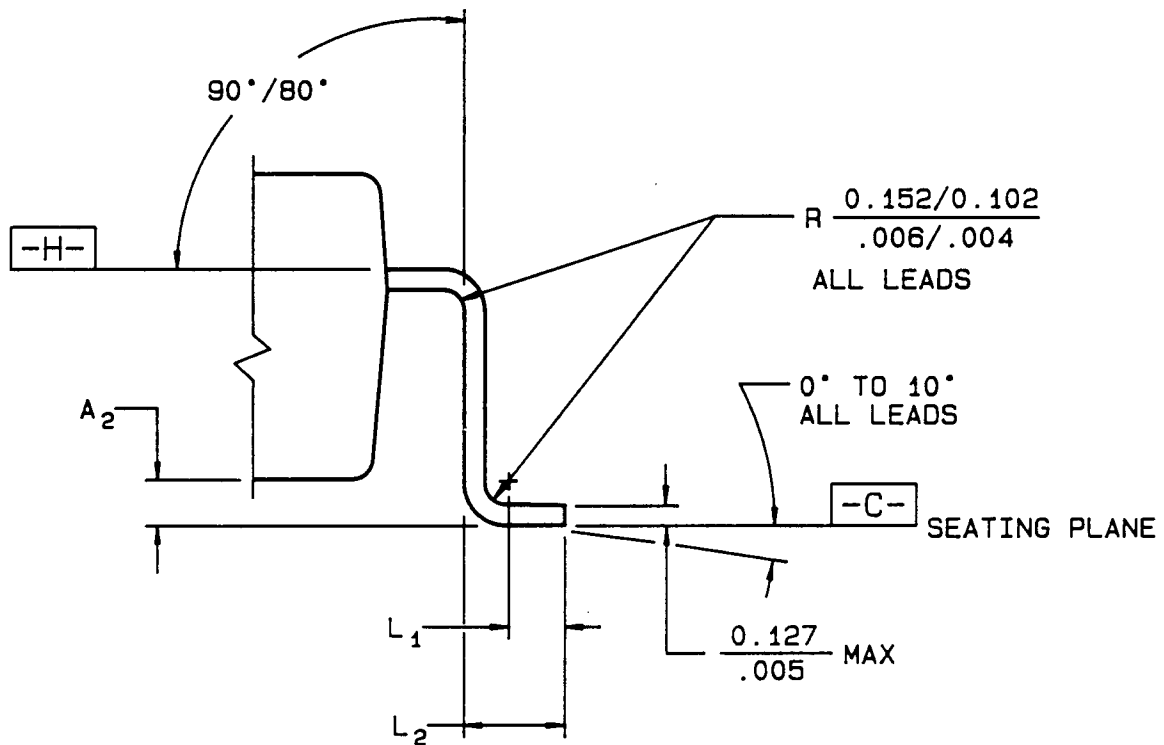
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TERMINAL DETAILS

FIGURE 3

mm
inch



DETAIL B

mm
inch

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PACKAGE FAMILY,
SQUARE (GULLWING)

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B

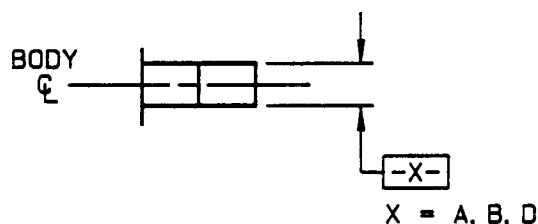
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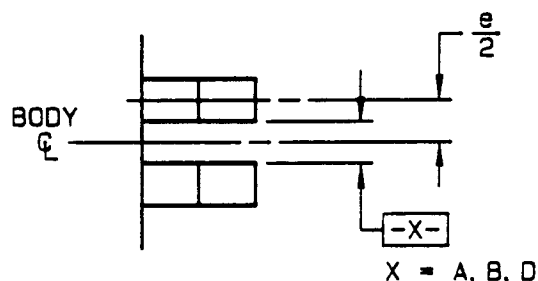
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NOTES:

1. ALL DIMENSIONS AND TOLERANCES CONFORM TO ANSI Y14.5M-1982.
2. CONTROLLING DIMENSION: INCHES.
3. DATUM PLANE $\boxed{-H-}$ LOCATED AT TOP OF MOLD PARTING LINE AND COINCIDENT WITH TOP OF LEAD, WHERE LEAD EXITS PLASTIC BODY.
4. DATUMS $\boxed{A-B}$ AND $\boxed{-D-}$ TO BE DETERMINED WHERE CENTER LEADS EXIT PLASTIC BODY AT DATUM PLANE $\boxed{-H-}$.
5. DIMENSIONS D_1 AND E_1 DO NOT INCLUDE MOLD PROTRUSION. ALLOWABLE MOLD PROTRUSION IS .254mm/.010in.
6. DETAILS OF PIN 1 IDENTIFIER ARE OPTIONAL BUT MUST BE LOCATED WITHIN ONE OF THE TWO ZONES INDICATED.
7. WHEN NUMBER OF LEADS PER SIDE IS EVEN, DATUMS $\boxed{A-B}$ AND $\boxed{-D-}$ ARE DETERMINED BY ADDING THE HALF-PITCH BASIC DIMENSION TO THE CENTERLINE OF THE ADJACENT LEAD, AS SHOWN. WHEN NUMBER OF LEADS PER SIDE IS ODD, DATUMS $\boxed{A-B}$ AND $\boxed{-D-}$ ARE DETERMINED BY THE CENTERLINE OF THE CENTER LEADS.
8. N IS THE MAXIMUM NUMBER OF TERMINALS.



ODD NUMBERED SIDES



EVEN NUMBERED SIDES

DETAIL A

| | | | | | |
|--|--|------------|--------------|--------|-----------------|
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ALL DIMENSIONS IN INCHES

| SYMBOL | VARIATIONS | | | | | | | | | | | |
|--------|------------|------|------|------|------|------|------|------|------|------|------|------|
| | AA | | NOTE | AB | | NOTE | AC | | NOTE | AD | | NOTE |
| | MIN. | MAX. | | MIN. | MAX. | | MIN. | MAX. | | MIN. | MAX. | |
| A | .066 | .090 | 5 | .081 | .090 | 5 | .081 | .090 | 5 | .081 | .090 | 5 |
| A1 | .046 | .063 | | .057 | .063 | | .057 | .063 | | .068 | .074 | |
| A2 | .004 | .008 | | | | | | | | | | |
| D | .356 | .364 | | .416 | .424 | | .496 | .504 | | .576 | .584 | |
| D1 | .284 | .288 | | .344 | .348 | | .424 | .428 | | .503 | .507 | |
| D3 | .180 | REF. | 5 | .240 | REF. | 5 | .320 | REF. | 5 | .400 | REF. | 5 |
| E | .356 | .364 | | .416 | .424 | | .496 | .504 | | .576 | .584 | |
| E1 | .284 | .288 | | .344 | .348 | | .424 | .428 | | .503 | .507 | |
| E3 | .180 | REF. | | .240 | REF. | | .320 | REF. | | .400 | REF. | |
| L1 | .009 | .015 | | | | | | | | | | |
| L2 | .016 | .028 | 8 | | | 8 | | | 8 | | | 8 |
| N | 40 | | | 52 | | | 68 | | | 84 | | |
| e | .020 | | | .020 | | | .020 | | | .020 | | |
| e1 | .008 | .012 | | .008 | .012 | | .008 | .012 | | .008 | .012 | |

ALL DIMENSIONS IN MILLIMETERS

| SYMBOL | VARIATIONS | | | | | | | | | | | |
|--------|------------|-------|------|--------|--------|------|--------|--------|------|--------|--------|------|
| | AA | | NOTE | AB | | NOTE | AC | | NOTE | AD | | NOTE |
| | MIN. | MAX. | | MIN. | MAX. | | MIN. | MAX. | | MIN. | MAX. | |
| A | 1.675 | 2.286 | 5 | 2.056 | 2.286 | 5 | 2.056 | 2.286 | 5 | 2.056 | 2.286 | 5 |
| A1 | 1.168 | 1.6 | | 1.447 | 1.6 | | 1.447 | 1.6 | | 1.725 | 1.878 | |
| A2 | 0.102 | 0.203 | | | | | | | | | | |
| D | 9.04 | 9.238 | | 10.558 | 10.761 | | 12.589 | 12.792 | | 14.619 | 14.822 | |
| D1 | 7.212 | 7.313 | 5 | 8.735 | 8.837 | 5 | 10.767 | 10.868 | 5 | 12.773 | 12.875 | 5 |
| D3 | 4.569 | REF. | | 6.091 | REF. | | 8.122 | REF. | | 10.152 | REF. | |
| E | 9.04 | 9.238 | | 10.558 | 10.761 | | 12.589 | 12.792 | | 14.619 | 14.822 | |
| E1 | 7.212 | 7.313 | | 8.735 | 8.837 | | 10.767 | 10.868 | | 12.773 | 12.875 | |
| E3 | 4.569 | REF. | 8 | 6.091 | REF. | 8 | 8.122 | REF. | 8 | 10.152 | REF. | 8 |
| L1 | 0.229 | 0.381 | | | | | | | | | | |
| L2 | 0.407 | 0.711 | | | | | | | | | | |
| N | 40 | | | 52 | | | 68 | | | 84 | | |
| e | 0.508 | | 8 | 0.508 | | 8 | 0.508 | | 8 | 0.508 | | 8 |
| e1 | 0.204 | 0.304 | | 0.204 | 0.304 | | 0.204 | 0.304 | | 0.204 | 0.304 | |
| NOTE | 1, 7 | | | | | | | | | | | |
| REF | 11-204 | | | 11-204 | | | 11-204 | | | 11-204 | | |
| ISSUE | A | | | A | | | A | | | A | | |

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SOLID STATE PRODUCTS
OUTLINE

TITLE: PLASTIC THIN LEAD
PACKAGE FAMILY.
SQUARE (GULLWING)

ISSUE
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DATE
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ALL DIMENSIONS IN INCHES

| SYMBOL | VARIATIONS | | | | | | | | | | | |
|--------|------------|------|------|-------|-------|------|------|------|------|------|------|------|
| | AE | | NOTE | AF | | NOTE | | | NOTE | | | NOTE |
| | MIN. | MAX. | | MIN. | MAX. | | MIN. | MAX. | | MIN. | MAX. | |
| A | .092 | .098 | 5 | .092 | .098 | 5 | | | | | | |
| A1 | .068 | .074 | | .068 | .074 | | | | | | | |
| A2 | .013 | .017 | | | | | | | | | | |
| D | .896 | .908 | | 1.286 | 1.294 | | | | | | | |
| D1 | .803 | .807 | | 1.203 | 1.207 | | | | | | | |
| D3 | .640 | REF. | | 1.080 | REF. | | | | | | | |
| E | .896 | .908 | 5 | 1.286 | 1.294 | 5 | | | | | | |
| E1 | .803 | .807 | | 1.203 | 1.207 | | | | | | | |
| E3 | .640 | REF. | | 1.080 | REF. | | | | | | | |
| L1 | .020 | .026 | | | | | | | | | | |
| L2 | .027 | .039 | | | | | | | | | | |
| N | 132 | 8 | 220 | 8 | | | | | | | | |
| e | .020 | | .020 | | | | | | | | | |
| e1 | .008 | .012 | .008 | .012 | | | | | | | | |

ALL DIMENSIONS IN MILLIMETERS

| SYMBOL | VARIATIONS | | | | | | | | | | | |
|--------|------------|--------|------|--------|--------|------|------|------|------|------|------|------|
| | AE | | NOTE | AF | | NOTE | | | NOTE | | | NOTE |
| | MIN. | MAX. | | MIN. | MAX. | | MIN. | MAX. | | MIN. | MAX. | |
| A | 2.337 | 2.489 | 5 | 2.337 | 2.489 | 5 | | | | | | |
| A1 | 1.727 | 1.880 | | 1.727 | 1.880 | | | | | | | |
| A2 | 0.330 | 0.431 | | | | | | | | | | |
| D | 22.758 | 23.063 | | 32.664 | 32.868 | | | | | | | |
| D1 | 20.396 | 20.498 | | 30.556 | 30.658 | | | | | | | |
| D3 | 16.256 | REF. | 5 | 27.432 | REF. | 5 | | | | | | |
| E | 22.758 | 23.063 | | 32.664 | 32.868 | | | | | | | |
| E1 | 20.396 | 20.498 | | 30.556 | 30.658 | | | | | | | |
| E3 | 16.256 | REF. | | 27.432 | REF. | | | | | | | |
| L1 | 0.508 | 0.660 | | | | | | | | | | |
| L2 | 0.685 | 0.989 | 8 | | | 8 | | | | | | |
| N | 132 | | | 220 | | | | | | | | |
| e | 0.508 | | | 0.508 | | | | | | | | |
| e1 | 0.204 | 0.304 | | 0.204 | 0.304 | | | | | | | |
| NOTE | | | | | | | | | | | | |
| REF | 11-239 | | | | | | | | | | | |
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OUTLINETITLE: PLASTIC THIN LEAD
PACKAGE FAMILY,
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BDATE
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ALL DIMENSIONS IN INCHES

| SYMBOL | VARIATIONS | | | | | | | | | | |
|--------|------------|------|------|-------|-------|------|------|------|------|------|------|
| | BA | | NOTE | BB | | NOTE | | | NOTE | | |
| | MIN. | MAX. | | MIN. | MAX. | | MIN. | MAX. | | MIN. | MAX. |
| A | .092 | .098 | | .092 | .098 | | | | | | |
| A1 | .068 | .074 | | .068 | .074 | | | | | | |
| A2 | .013 | .017 | | | | | | | | | |
| D | .896 | .908 | | 1.286 | 1.294 | | | | | | |
| D1 | .803 | .807 | 5 | 1.203 | 1.207 | 5 | | | | | |
| D3 | .660 | REF. | | 1.050 | REF. | | | | | | |
| E | .896 | .908 | | 1.286 | 1.294 | | | | | | |
| E1 | .803 | .807 | 5 | 1.203 | 1.207 | 5 | | | | | |
| E3 | .660 | REF. | | 1.050 | REF. | | | | | | |
| L1 | .020 | .026 | | | | | | | | | |
| L2 | .027 | .039 | | | | | | | | | |
| N | 180 | | 8 | 284 | | 8 | | | | | |
| e | .015 | | | .015 | | | | | | | |
| e1 | .008 | .012 | | .008 | .012 | | | | | | |

ALL DIMENSIONS IN MILLIMETERS

| SYMBOL | VARIATIONS | | | | | | | | | | |
|--------|------------|--------|------|--------|--------|------|------|------|------|------|------|
| | BA | | NOTE | BB | | NOTE | | | NOTE | | |
| | MIN. | MAX. | | MIN. | MAX. | | MIN. | MAX. | | MIN. | MAX. |
| A | 2.337 | 2.489 | | 2.337 | 2.489 | | | | | | |
| A1 | 1.727 | 1.880 | | 1.727 | 1.880 | | | | | | |
| A2 | 0.330 | 0.431 | | | | | | | | | |
| D | 22.758 | 23.063 | | 32.664 | 32.868 | | | | | | |
| D1 | 20.396 | 20.498 | 5 | 30.556 | 30.658 | 5 | | | | | |
| D3 | 16.670 | REF. | | 26.670 | REF. | | | | | | |
| E | 22.758 | 23.063 | | 32.664 | 32.868 | | | | | | |
| E1 | 20.396 | 20.498 | 5 | 30.556 | 30.658 | 5 | | | | | |
| E3 | 16.670 | REF. | | 26.670 | REF. | | | | | | |
| L1 | 0.508 | 0.660 | | | | | | | | | |
| L2 | 0.685 | 0.989 | | | | | | | | | |
| N | 180 | | 8 | 284 | | 8 | | | | | |
| e | 0.381 | | | 0.381 | | | | | | | |
| e1 | 0.204 | 0.304 | | 0.204 | 0.304 | | | | | | |
| NOTE | | | | | | | | | | | |
| REF | 11-240 | | | | | | | | | | |
| ISSUE | B | | | | | | | | | | |

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OUTLINE

TITLE: PLASTIC THIN LEAD
PACKAGE FAMILY,
SQUARE (GULLWING)

ISSUE
B

DATE
7/89

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