

FIGURE 1

ALL DIMENSIONS IN MILLIMETERS

JEDEC
SOLID STATE PRODUCT
OUTLINES

THIS **STANDARD OUTLINE** HAS BEEN PREPARED BY THE JEDEC JC-11 COMMITTEE AND APPROVED BY THE JEDEC COUNCIL AND REFLECTS A PRODUCT WITH WIDE ACCEPTANCE IN THE ELECTRONICS INDUSTRY; CHANGES ARE NOT LIKELY TO OCCUR.

TITLE PLASTIC QUAD
FLAT PACKAGE OUTLINE
1.0 & 1.4 mm THICK
BODY FAMILIES 2.0 mm
FOOTPRINT

JESD-30 DESIGNATOR
L-PQFP-G &
T-PQFP-G

ISSUE
B

DATE
08/97

MS-026

PAGE
1
OF
18

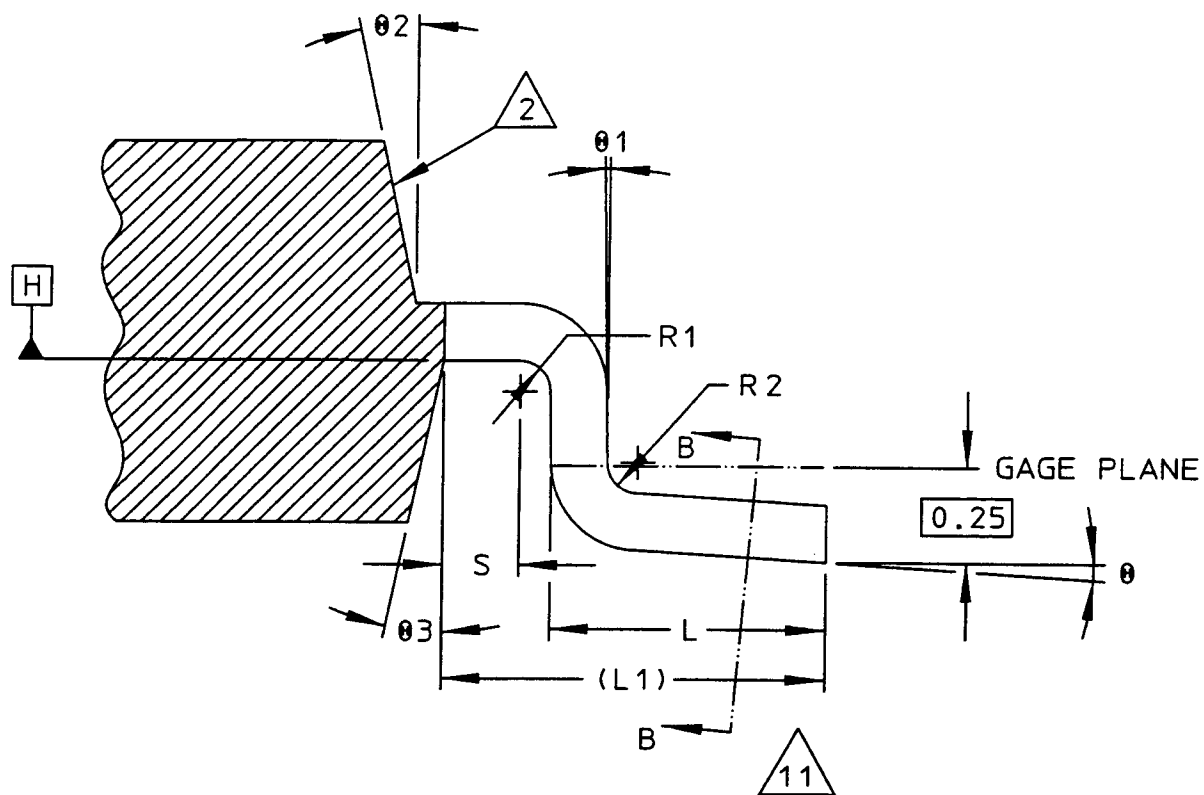


FIG 2 SECTION A-A

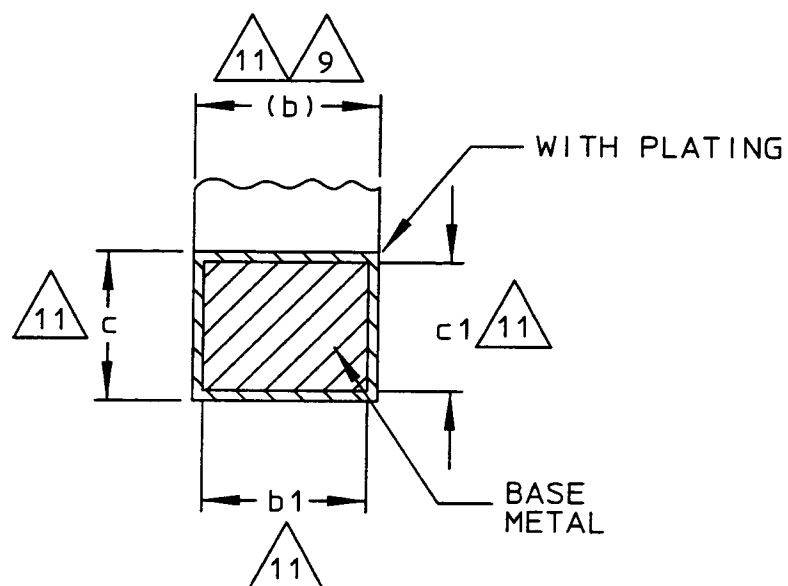
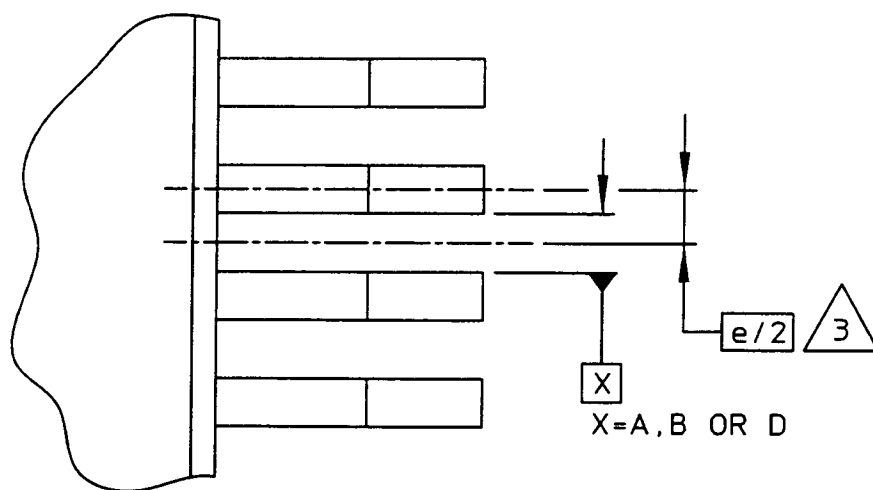
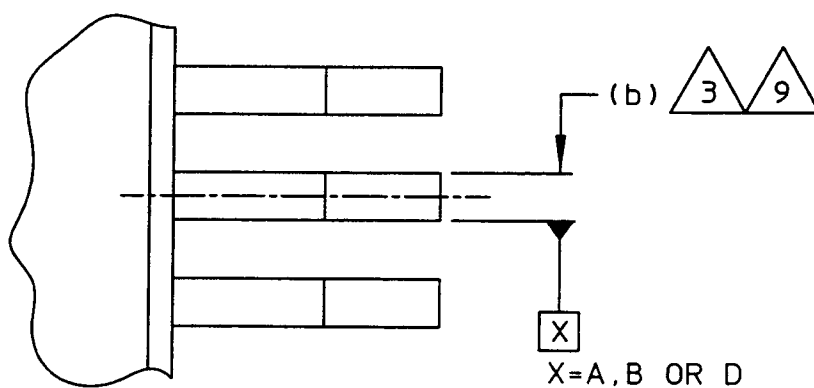


FIGURE 3 SECTION B-B

| | | | | | |
|--|---|------------|---------------|--------|-----------------------|
| JEDEC SOLID STATE PRODUCT OUTLINES | TITLE PLASTIC QUAD FLAT PACKAGE OUTLINE 1.0 & 1.4 mm THICK BODY FAMILIES 2.0 mm FOOTPRINT | ISSUE B | DATE 08/97 | MS-026 | PAGE 2 OF 18 |
|--|---|------------|---------------|--------|-----------------------|



EVEN LEAD SIDES
TOP VIEW



ODD LEAD SIDES
TOP VIEW

FIGURE 4

| | | | | | |
|--|--|------------|---------------|--------|-----------------------|
| JEDEC SOLID STATE PRODUCT OUTLINES | TITLE PLASTIC QUAD FLAT PACKAGE OUTLINE 1.0 & 1.4 mm THICK BODY FAMILIES 2.0 mm FOOTPRINT | ISSUE B | DATE 08/97 | MS-026 | PAGE 3 OF 18 |
|--|--|------------|---------------|--------|-----------------------|

NOTES:

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.

2 THE TOP PACKAGE BODY SIZE MAY BE SMALLER THAN THE BOTTOM PACKAGE SIZE BY AS MUCH AS 0.15 mm.

3 DATUMS A-B AND D TO BE DETERMINED AT DATUM PLANE H.

4 TO BE DETERMINED AT SEATING DATUM PLANE C.

5 DIMENSIONS D1 AND E1 DO NOT INCLUDE MOLD PROTRUSIONS. ALLOWABLE PROTRUSION IS 0.25 mm PER SIDE. D1 AND E1 ARE MAXIMUM PLASTIC BODY SIZE DIMENSIONS INCLUDING MOLD MISMATCH.

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

7 RECTANGULAR VARIATIONS AHA AND BHA HAVE 38 AND 26 LEADS ON SIDES D AND E RESPECTIVELY. RECTANGULAR VARIATIONS AHB AND BHB HAVE 30 AND 20 LEADS ON SIDES D AND E RESPECTIVELY.

8. ALL DIMENSIONS ARE IN MILLIMETERS.

9 DIMENSION b DOES NOT INCLUDE DAMBAR PROTRUSION. ALLOWABLE DAMBAR PROTRUSION SHALL NOT CAUSE THE LEAD WIDTH TO EXCEED THE MAXIMUM b DIMENSION BY MORE THAN 0.08 mm. DAMBAR CANNOT BE LOCATED ON THE LOWER RADIUS OR THE FOOT. MINIMUM SPACE BETWEEN PROTRUSION AND AN ADJACENT LEAD IS 0.07 mm FOR 0.4 mm AND 0.5 mm PITCH PACKAGES.

10 EXACT SHAPE OF EACH CORNER IS OPTIONAL.

11 THESE DIMENSIONS APPLY TO THE FLAT SECTION OF THE LEAD BETWEEN 0.10 mm AND 0.25 mm FROM THE LEAD TIP.

12 A1 IS DEFINED AS THE DISTANCE FROM THE SEATING PLANE TO THE LOWEST POINT ON THE PACKAGE BODY.

| | | | | | |
|--|---|----------------|-------------------|--------|-----------------------|
| JEDEC SOLID STATE PRODUCT OUTLINES | TITLE PLASTIC QUAD FLAT PACKAGE OUTLINE 1.0 & 1.4 mm THICK BODY FAMILIES 2.0 mm FOOTPRINT | ISSUE B | DATE 08/97 | MS-026 | PAGE 4 OF 18 |
|--|---|----------------|-------------------|--------|-----------------------|

| S Y M B | COMMON DIMENSIONS | | | N O T E |
|---------------------------------|-------------------|-------|-------|------------------|
| | MIN. | NOM. | MAX. | |
| Ø | 0° | 3.5° | 7° | |
| Ø1 | 0° | ----- | ----- | |
| Ø2 | 11° | 12° | 13° | |
| Ø3 | 11° | 12° | 13° | |
| C | 0.09 | ----- | 0.20 | 11 |
| C1 | 0.09 | ----- | 0.16 | 11 |
| L | 0.45 | 0.60 | 0.75 | |
| L1 | 1.00 REF | | | |
| R1 | 0.08 | ----- | ----- | |
| R2 | 0.08 | ----- | 0.20 | |
| S | 0.20 | ----- | ----- | |
| TOLERANCES OF FORM AND POSITION | | | | |
| aaa | 0.20 | | | |
| bbb | 0.20 | | | |

| SUMMARY TABLE | | | | |
|---------------|-------|------------|-------------------------|-------------------------|
| BODY SIZE | PITCH | LEAD COUNT | 1.0mm THK BODY T-PQFP-G | 1.4mm THK BODY L-PQFP-G |
| 4 X 4 | 0.65 | 20 | AKA | BKA |
| 4 X 4 | 0.50 | 24 | AKB | BKB |
| 4 X 4 | 0.40 | 32 | AKC | BKC |
| 5 X 5 | 0.50 | 32 | AAA | BAA |
| 5 X 5 | 0.40 | 40 | AAB | BAB |
| 7 X 7 | 0.80 | 32 | ABA | BBA |
| 7 X 7 | 0.65 | 40 | ABB | BBB |
| 7 X 7 | 0.50 | 48 | ABC | BBC |
| 7 X 7 | 0.40 | 64 | ABD | BBD |
| 10 X 10 | 1.00 | 36 | ACA | BCA |
| 10 X 10 | 0.80 | 44 | ACB | BCB |
| 10 X 10 | 0.65 | 52 | ACC | BCC |
| 10 X 10 | 0.50 | 64 | ACD | BCD |
| 10 X 10 | 0.40 | 80 | ACE | BCE |
| 12 X 12 | 1.00 | 44 | ADA | BDA |
| 12 X 12 | 0.80 | 52 | ADB | BDB |
| 12 X 12 | 0.65 | 64 | ADC | BDC |
| 12 X 12 | 0.50 | 80 | ADD | BDD |
| 12 X 12 | 0.40 | 100 | ADE | BDE |
| 14 X 14 | 1.00 | 52 | AEA | BEA |
| 14 X 14 | 0.80 | 64 | AEB | BEB |
| 14 X 14 | 0.65 | 80 | AEC | BEC |
| 14 X 14 | 0.50 | 100 | AED | BED |
| 14 X 14 | 0.40 | 120 | AEE | BEE |
| 20 X 20 | 0.65 | 112 | AFA | BFA |
| 20 X 20 | 0.50 | 144 | AFB | BFB |
| 20 X 20 | 0.40 | 176 | AFC | BFC |
| 24 X 24 | 0.50 | 176 | AGA | BGA |
| 24 X 24 | 0.40 | 216 | AGB | BGB |
| 14 X 20 | 0.65 | 100 | AHA | BHA |
| 14 X 20 | 0.50 | 128 | AHB | BHB |
| 28 X 28 | 0.65 | 160 | --- | BJA |
| 28 X 28 | 0.50 | 208 | --- | BJB |
| 28 X 28 | 0.40 | 256 | --- | BJC |

| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|----------|------|------|-------|----------|------|------|-------|----------|------|------|-------|
| SYMBOL | AAA | | | NOTE | AAB | | | NOTE | ABA | | | NOTE |
| | SQUARE | | | | SQUARE | | | | SQUARE | | | |
| | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | |
| A | ---- | ---- | 1.20 | | ---- | ---- | 1.20 | | ---- | ---- | 1.20 | |
| A1 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 |
| A2 | 0.95 | 1.00 | 1.05 | | 0.95 | 1.00 | 1.05 | | 0.95 | 1.00 | 1.05 | |
| b | 0.17 | 0.22 | 0.27 | 9, 11 | 0.13 | 0.18 | 0.23 | 9, 11 | 0.30 | 0.37 | 0.45 | 9, 11 |
| b1 | 0.17 | 0.20 | 0.23 | 11 | 0.13 | 0.16 | 0.19 | 11 | 0.30 | 0.35 | 0.40 | 11 |
| D | 7.00 BSC | | | 4 | 7.00 BSC | | | 4 | 9.00 BSC | | | 4 |
| D1 | 5.00 BSC | | | 5, 2 | 5.00 BSC | | | 5, 2 | 7.00 BSC | | | 5, 2 |
| e | 0.50 BSC | | | | 0.40 BSC | | | | 0.80 BSC | | | |
| E | 7.00 BSC | | | 4 | 7.00 BSC | | | 4 | 9.00 BSC | | | 4 |
| E1 | 5.00 BSC | | | 5, 2 | 5.00 BSC | | | 5, 2 | 7.00 BSC | | | 5, 2 |
| N | 32 | | | | 40 | | | | 32 | | | |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.08 | | | | 0.08 | | | | 0.10 | | | |
| ddd | 0.08 | | | | 0.07 | | | | 0.20 | | | |
| NOTE | 1, 8 | | | | 1, 8 | | | | 1, 8 | | | |
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| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|----------|------|------|-------|----------|------|------|-------|----------|------|------|-------|
| SYMBOL | ABB | | | NOTE | ABC | | | NOTE | ABD | | | NOTE |
| | SQUARE | | | | SQUARE | | | | SQUARE | | | |
| | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | |
| A | ---- | ---- | 1.20 | | ---- | ---- | 1.20 | | ---- | ---- | 1.20 | |
| A1 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 |
| A2 | 0.95 | 1.00 | 1.05 | | 0.95 | 1.00 | 1.05 | | 0.95 | 1.00 | 1.05 | |
| b | 0.22 | 0.32 | 0.38 | 9, 11 | 0.17 | 0.22 | 0.27 | 9, 11 | 0.13 | 0.18 | 0.23 | 9, 11 |
| b1 | 0.22 | 0.30 | 0.33 | 11 | 0.17 | 0.20 | 0.23 | 11 | 0.13 | 0.16 | 0.19 | 11 |
| D | 9.00 BSC | | | 4 | 9.00 BSC | | | 4 | 9.00 BSC | | | 4 |
| D1 | 7.00 BSC | | | 5, 2 | 7.00 BSC | | | 5, 2 | 7.00 BSC | | | 5, 2 |
| e | 0.65 BSC | | | | 0.50 BSC | | | | 0.40 BSC | | | |
| E | 9.00 BSC | | | 4 | 9.00 BSC | | | 4 | 9.00 BSC | | | 4 |
| E1 | 7.00 BSC | | | 5, 2 | 7.00 BSC | | | 5, 2 | 7.00 BSC | | | 5, 2 |
| N | 40 | | | | 48 | | | | 64 | | | |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.10 | | | | 0.08 | | | | 0.08 | | | |
| ddd | 0.13 | | | | 0.08 | | | | 0.07 | | | |
| NOTE | 1, 8 | | | | 1, 8 | | | | 1, 8 | | | |
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| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|-----------|------|------|-------|-----------|------|------|-------|-----------|------|------|-------|
| SYMBOL | ACA | | | NOTE | ACB | | | NOTE | ACC | | | NOTE |
| | SQUARE | | | | SQUARE | | | | SQUARE | | | |
| | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | |
| A | ---- | ---- | 1.20 | | ---- | ---- | 1.20 | | ---- | ---- | 1.20 | |
| A1 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 |
| A2 | 0.95 | 1.00 | 1.05 | | 0.95 | 1.00 | 1.05 | | 0.95 | 1.00 | 1.05 | |
| b | 0.35 | 0.42 | 0.50 | 9, 11 | 0.30 | 0.37 | 0.45 | 9, 11 | 0.22 | 0.32 | 0.38 | 9, 11 |
| b1 | 0.35 | 0.40 | 0.45 | 11 | 0.30 | 0.35 | 0.40 | 11 | 0.22 | 0.30 | 0.33 | 11 |
| D | 12.00 BSC | | | 4 | 12.00 BSC | | | 4 | 12.00 BSC | | | 4 |
| D1 | 10.00 BSC | | | 5, 2 | 10.00 BSC | | | 5, 2 | 10.00 BSC | | | 5, 2 |
| e | 1.00 BSC | | | | 0.80 BSC | | | | 0.65 BSC | | | |
| E | 12.00 BSC | | | 4 | 12.00 BSC | | | 4 | 12.00 BSC | | | 4 |
| E1 | 10.00 BSC | | | 5, 2 | 10.00 BSC | | | 5, 2 | 10.00 BSC | | | 5, 2 |
| N | 36 | | | | 44 | | | | 52 | | | |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.10 | | | | 0.10 | | | | 0.10 | | | |
| ddd | 0.20 | | | | 0.20 | | | | 0.13 | | | |
| NOTE | 1, 8 | | | | 1, 8 | | | | 1, 8 | | | |
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| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|-----------|------|------|-------|-----------|------|------|-------|-----------|------|------|-------|
| SYMBOL | ACD | | | NOTE | ACE | | | NOTE | ADA | | | NOTE |
| | SQUARE | | | | SQUARE | | | | SQUARE | | | |
| | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | |
| A | ---- | ---- | 1.20 | | ---- | ---- | 1.20 | | ---- | ---- | 1.20 | |
| A1 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 |
| A2 | 0.95 | 1.00 | 1.05 | | 0.95 | 1.00 | 1.05 | | 0.95 | 1.00 | 1.05 | |
| b | 0.17 | 0.22 | 0.27 | 9, 11 | 0.13 | 0.18 | 0.23 | 9, 11 | 0.35 | 0.42 | 0.50 | 9, 11 |
| b1 | 0.17 | 0.20 | 0.23 | 11 | 0.13 | 0.16 | 0.19 | 11 | 0.35 | 0.40 | 0.45 | 11 |
| D | 12.00 BSC | | | 4 | 12.00 BSC | | | 4 | 14.00 BSC | | | 4 |
| D1 | 10.00 BSC | | | 5, 2 | 10.00 BSC | | | 5, 2 | 12.00 BSC | | | 5, 2 |
| e | 0.50 BSC | | | | 0.40 BSC | | | | 1.00 BSC | | | |
| E | 12.00 BSC | | | 4 | 12.00 BSC | | | 4 | 14.00 BSC | | | 4 |
| E1 | 10.00 BSC | | | 5, 2 | 10.00 BSC | | | 5, 2 | 12.00 BSC | | | 5, 2 |
| N | 64 | | | | 80 | | | | 44 | | | |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.08 | | | | 0.08 | | | | 0.10 | | | |
| ddd | 0.08 | | | | 0.07 | | | | 0.20 | | | |
| NOTE | 1, 8 | | | | 1, 8 | | | | 1, 8 | | | |
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| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|-----------|------|------|-------|-----------|------|------|-------|-----------|------|------|-------|
| SYMBOL | ADB | | | NOTE | ADC | | | NOTE | ADD | | | NOTE |
| | SQUARE | | | | SQUARE | | | | SQUARE | | | |
| | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | |
| A | ---- | ---- | 1.20 | | ---- | ---- | 1.20 | | ---- | ---- | 1.20 | |
| A1 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 |
| A2 | 0.95 | 1.00 | 1.05 | | 0.95 | 1.00 | 1.05 | | 0.95 | 1.00 | 1.05 | |
| b | 0.30 | 0.37 | 0.45 | 9, 11 | 0.22 | 0.32 | 0.38 | 9, 11 | 0.17 | 0.22 | 0.27 | 9, 11 |
| b1 | 0.30 | 0.35 | 0.40 | 11 | 0.22 | 0.30 | 0.33 | 11 | 0.17 | 0.20 | 0.23 | 11 |
| D | 14.00 BSC | | | 4 | 14.00 BSC | | | 4 | 14.00 BSC | | | 4 |
| D1 | 12.00 BSC | | | 5, 2 | 12.00 BSC | | | 5, 2 | 12.00 BSC | | | 5, 2 |
| e | 0.80 BSC | | | | 0.65 BSC | | | | 0.50 BSC | | | |
| E | 14.00 BSC | | | 4 | 14.00 BSC | | | 4 | 14.00 BSC | | | 4 |
| E1 | 12.00 BSC | | | 5, 2 | 12.00 BSC | | | 5, 2 | 12.00 BSC | | | 5, 2 |
| N | 52 | | | | 64 | | | | 80 | | | |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.10 | | | | 0.10 | | | | 0.08 | | | |
| ddd | 0.20 | | | | 0.13 | | | | 0.08 | | | |
| NOTE | 1, 8 | | | | 1, 8 | | | | 1, 8 | | | |
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| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|-----------|------|------|-------|-----------|------|------|-------|-----------|------|------|-------|
| SYMBOL | ADE | | | NOTE | AEA | | | NOTE | AEB | | | NOTE |
| | SQUARE | | | | SQUARE | | | | SQUARE | | | |
| | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | |
| A | ---- | ---- | 1.20 | | ---- | ---- | 1.20 | | ---- | ---- | 1.20 | |
| A1 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 |
| A2 | 0.95 | 1.00 | 1.05 | | 0.95 | 1.00 | 1.05 | | 0.95 | 1.00 | 1.05 | |
| b | 0.13 | 0.18 | 0.23 | 9, 11 | 0.35 | 0.42 | 0.50 | 9, 11 | 0.30 | 0.37 | 0.45 | 9, 11 |
| b1 | 0.13 | 0.16 | 0.19 | 11 | 0.35 | 0.40 | 0.45 | 11 | 0.30 | 0.35 | 0.40 | 11 |
| D | 14.00 BSC | | | 4 | 16.00 BSC | | | 4 | 16.00 BSC | | | 4 |
| D1 | 12.00 BSC | | | 5, 2 | 14.00 BSC | | | 5, 2 | 14.00 BSC | | | 5, 2 |
| e | 0.40 BSC | | | | 1.00 BSC | | | | 0.80 BSC | | | |
| E | 14.00 BSC | | | 4 | 16.00 BSC | | | 4 | 16.00 BSC | | | 4 |
| E1 | 12.00 BSC | | | 5, 2 | 14.00 BSC | | | 5, 2 | 14.00 BSC | | | 5, 2 |
| N | 100 | | | | 52 | | | | 64 | | | |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.08 | | | | 0.10 | | | | 0.10 | | | |
| ddd | 0.07 | | | | 0.20 | | | | 0.20 | | | |
| NOTE | 1, 8 | | | | 1, 8 | | | | 1, 8 | | | |
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| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|-----------|------|------|-------|-----------|------|------|-------|-----------|------|------|-------|
| SYMBOL | AEC | | | NOTE | AED | | | NOTE | AEE | | | NOTE |
| | SQUARE | | | | SQUARE | | | | SQUARE | | | |
| | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | |
| A | ---- | ---- | 1.20 | | ---- | ---- | 1.20 | | ---- | ---- | 1.20 | |
| A1 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 |
| A2 | 0.95 | 1.00 | 1.05 | | 0.95 | 1.00 | 1.05 | | 0.95 | 1.00 | 1.05 | |
| b | 0.22 | 0.32 | 0.38 | 9, 11 | 0.17 | 0.22 | 0.27 | 9, 11 | 0.13 | 0.18 | 0.23 | 9, 11 |
| b1 | 0.22 | 0.30 | 0.33 | 11 | 0.17 | 0.20 | 0.23 | 11 | 0.13 | 0.16 | 0.19 | 11 |
| D | 16.00 BSC | | | 4 | 16.00 BSC | | | 4 | 16.00 BSC | | | 4 |
| D1 | 14.00 BSC | | | 5, 2 | 14.00 BSC | | | 5, 2 | 14.00 BSC | | | 5, 2 |
| e | 0.65 BSC | | | | 0.50 BSC | | | | 0.40 BSC | | | |
| E | 16.00 BSC | | | 4 | 16.00 BSC | | | 4 | 16.00 BSC | | | 4 |
| E1 | 14.00 BSC | | | 5, 2 | 14.00 BSC | | | 5, 2 | 14.00 BSC | | | 5, 2 |
| N | 80 | | | | 100 | | | | 120 | | | |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.10 | | | | 0.08 | | | | 0.08 | | | |
| ddd | 0.13 | | | | 0.08 | | | | 0.07 | | | |
| NOTE | 1, 8 | | | | 1, 8 | | | | 1, 8 | | | |
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| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|-----------|------|------|-------|-----------|------|------|-------|-----------|------|------|-------|
| SYMBOL | AFA | | | NOTE | AFB | | | NOTE | AFC | | | NOTE |
| | SQUARE | | | | SQUARE | | | | SQUARE | | | |
| | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | |
| A | ---- | ---- | 1.20 | | ---- | ---- | 1.20 | | ---- | ---- | 1.20 | |
| A1 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 |
| A2 | 0.95 | 1.00 | 1.05 | | 0.95 | 1.00 | 1.05 | | 0.95 | 1.00 | 1.05 | |
| b | 0.22 | 0.32 | 0.38 | 9, 11 | 0.17 | 0.22 | 0.27 | 9, 11 | 0.13 | 0.18 | 0.23 | 9, 11 |
| b1 | 0.22 | 0.30 | 0.33 | 11 | 0.17 | 0.20 | 0.23 | 11 | 0.13 | 0.16 | 0.19 | 11 |
| D | 22.00 BSC | | | 4 | 22.00 BSC | | | 4 | 22.00 BSC | | | 4 |
| D1 | 20.00 BSC | | | 5, 2 | 20.00 BSC | | | 5, 2 | 20.00 BSC | | | 5, 2 |
| e | 0.65 BSC | | | | 0.50 BSC | | | | 0.40 BSC | | | |
| E | 22.00 BSC | | | 4 | 22.00 BSC | | | 4 | 22.00 BSC | | | 4 |
| E1 | 20.00 BSC | | | 5, 2 | 20.00 BSC | | | 5, 2 | 20.00 BSC | | | 5, 2 |
| N | 112 | | | | 144 | | | | 176 | | | |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.10 | | | | 0.08 | | | | 0.08 | | | |
| ddd | 0.13 | | | | 0.08 | | | | 0.07 | | | |
| NOTE | 1, 8 | | | | 1, 8 | | | | 1, 8 | | | |
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| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|-----------|------|------|-------|-----------|------|------|-------|-------------|------|------|-------|
| SYMBOL | AGA | | | NOTE | AGB | | | NOTE | AHA | | | NOTE |
| | SQUARE | | | | SQUARE | | | | RECTANGULAR | | | |
| | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | |
| A | ---- | ---- | 1.20 | | ---- | ---- | 1.20 | | ---- | ---- | 1.20 | |
| A1 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 |
| A2 | 0.95 | 1.00 | 1.05 | | 0.95 | 1.00 | 1.05 | | 0.95 | 1.00 | 1.05 | |
| b | 0.17 | 0.22 | 0.27 | 9, 11 | 0.13 | 0.18 | 0.23 | 9, 11 | 0.22 | 0.32 | 0.38 | 9, 11 |
| b1 | 0.17 | 0.20 | 0.23 | 11 | 0.13 | 0.16 | 0.19 | 11 | 0.22 | 0.30 | 0.33 | 11 |
| D | 26.00 BSC | | | 4 | 26.00 BSC | | | 4 | 22.00 BSC | | | 4 |
| D1 | 24.00 BSC | | | 5, 2 | 24.00 BSC | | | 5, 2 | 20.00 BSC | | | 5, 2 |
| e | 0.50 BSC | | | | 0.40 BSC | | | | 0.65 BSC | | | |
| E | 26.00 BSC | | | 4 | 26.00 BSC | | | 4 | 16.00 BSC | | | 4 |
| E1 | 24.00 BSC | | | 5, 2 | 24.00 BSC | | | 5, 2 | 14.00 BSC | | | 5, 2 |
| N | 176 | | | | 216 | | | | 100 | | | 7 |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.08 | | | | 0.08 | | | | 0.10 | | | |
| ddd | 0.08 | | | | 0.07 | | | | 0.13 | | | |
| NOTE | 1, 8 | | | | 1, 8 | | | | 1, 7, 8 | | | |
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| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|-------------|------|------|-------|----------|------|------|-------|----------|------|------|-------|
| SYMBOL | AHB | | | NOTE | AKA | | | NOTE | AKB | | | NOTE |
| | RECTANGULAR | | | | SQUARE | | | | SQUARE | | | |
| | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | |
| A | ---- | ---- | 1.20 | | ---- | ---- | 1.20 | | ---- | ---- | 1.20 | |
| A1 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 |
| A2 | 0.95 | 1.00 | 1.05 | | 0.95 | 1.00 | 1.05 | | 0.95 | 1.00 | 1.05 | |
| b | 0.17 | 0.22 | 0.27 | 9, 11 | 0.22 | 0.32 | 0.38 | 9, 11 | 0.17 | 0.22 | 0.27 | 9, 11 |
| b1 | 0.17 | 0.20 | 0.23 | 11 | 0.22 | 0.30 | 0.33 | 11 | 0.17 | 0.20 | 0.23 | 11 |
| D | 22.00 BSC | | | 4 | 6.00 BSC | | | 4 | 6.00 BSC | | | 4 |
| D1 | 20.00 BSC | | | 5, 2 | 4.00 BSC | | | 5, 2 | 4.00 BSC | | | 5, 2 |
| e | 0.50 BSC | | | | 0.65 BSC | | | | 0.50 BSC | | | |
| E | 16.00 BSC | | | 4 | 6.00 BSC | | | 4 | 6.00 BSC | | | 4 |
| E1 | 14.00 BSC | | | 5, 2 | 4.00 BSC | | | 5, 2 | 4.00 BSC | | | 5, 2 |
| N | 128 | | | 7 | 20 | | | | 24 | | | |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.08 | | | | 0.10 | | | | 0.08 | | | |
| ddd | 0.08 | | | | 0.13 | | | | 0.08 | | | |
| NOTE | 1, 7, 8 | | | | 1, 8 | | | | 1, 8 | | | |
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| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|----------|------|------|-------|--|--|--|------|--|--|--|------|
| SYMBOL | AKC | | | NOTE | | | | NOTE | | | | NOTE |
| | SQUARE | | | | | | | | | | | |
| | MIN. | NOM. | MAX. | | | | | | | | | |
| A | ---- | ---- | 1.20 | | | | | | | | | |
| A1 | 0.05 | ---- | 0.15 | 12 | | | | | | | | |
| A2 | 0.95 | 1.00 | 1.05 | | | | | | | | | |
| b | 0.13 | 0.18 | 0.23 | 9, 11 | | | | | | | | |
| b1 | 0.13 | 0.16 | 0.19 | 11 | | | | | | | | |
| D | 6.00 BSC | | | 4 | | | | | | | | |
| D1 | 4.00 BSC | | | 5, 2 | | | | | | | | |
| e | 0.40 BSC | | | | | | | | | | | |
| E | 6.00 BSC | | | 4 | | | | | | | | |
| E1 | 4.00 BSC | | | 5, 2 | | | | | | | | |
| N | 32 | | | | | | | | | | | |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.08 | | | | | | | | | | | |
| ddd | 0.07 | | | | | | | | | | | |
| NOTE | 1, 8 | | | | | | | | | | | |
| REF | 11-483S | | | | | | | | | | | |
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| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|----------|------|------|-------|----------|------|------|-------|----------|------|------|-------|
| SYMBOL | BAA | | | NOTE | BAB | | | NOTE | BBA | | | NOTE |
| | SQUARE | | | | SQUARE | | | | SQUARE | | | |
| | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | |
| A | ---- | ---- | 1.60 | | ---- | ---- | 1.60 | | ---- | ---- | 1.60 | |
| A1 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 |
| A2 | 1.35 | 1.40 | 1.45 | | 1.35 | 1.40 | 1.45 | | 1.35 | 1.40 | 1.45 | |
| b | 0.17 | 0.22 | 0.27 | 9, 11 | 0.13 | 0.18 | 0.23 | 9, 11 | 0.30 | 0.37 | 0.45 | 9, 11 |
| b1 | 0.17 | 0.20 | 0.23 | 11 | 0.13 | 0.16 | 0.19 | 11 | 0.30 | 0.35 | 0.40 | 11 |
| D | 7.00 BSC | | | 4 | 7.00 BSC | | | 4 | 9.00 BSC | | | 4 |
| D1 | 5.00 BSC | | | 5, 2 | 5.00 BSC | | | 5, 2 | 7.00 BSC | | | 5, 2 |
| e | 0.50 BSC | | | | 0.40 BSC | | | | 0.80 BSC | | | |
| E | 7.00 BSC | | | 4 | 7.00 BSC | | | 4 | 9.00 BSC | | | 4 |
| E1 | 5.00 BSC | | | 5, 2 | 5.00 BSC | | | 5, 2 | 7.00 BSC | | | 5, 2 |
| N | 32 | | | | 40 | | | | 32 | | | |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.08 | | | | 0.08 | | | | 0.10 | | | |
| ddd | 0.08 | | | | 0.07 | | | | 0.20 | | | |
| NOTE | 1, 8 | | | | 1, 8 | | | | 1, 8 | | | |
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| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|----------|------|------|-------|----------|------|------|-------|----------|------|------|-------|
| SYMBOL | BBB | | | NOTE | BBC | | | NOTE | BBD | | | NOTE |
| | SQUARE | | | | SQUARE | | | | SQUARE | | | |
| | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | |
| A | ---- | ---- | 1.60 | | ---- | ---- | 1.60 | | ---- | ---- | 1.60 | |
| A1 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 |
| A2 | 1.35 | 1.40 | 1.45 | | 1.35 | 1.40 | 1.45 | | 1.35 | 1.40 | 1.45 | |
| b | 0.22 | 0.32 | 0.38 | 9, 11 | 0.17 | 0.22 | 0.27 | 9, 11 | 0.13 | 0.18 | 0.23 | 9, 11 |
| b1 | 0.22 | 0.30 | 0.33 | 11 | 0.17 | 0.20 | 0.23 | 11 | 0.13 | 0.16 | 0.19 | 11 |
| D | 9.00 BSC | | | 4 | 9.00 BSC | | | 4 | 9.00 BSC | | | 4 |
| D1 | 7.00 BSC | | | 5, 2 | 7.00 BSC | | | 5, 2 | 7.00 BSC | | | 5, 2 |
| e | 0.65 BSC | | | | 0.50 BSC | | | | 0.40 BSC | | | |
| E | 9.00 BSC | | | 4 | 9.00 BSC | | | 4 | 9.00 BSC | | | 4 |
| E1 | 7.00 BSC | | | 5, 2 | 7.00 BSC | | | 5, 2 | 7.00 BSC | | | 5, 2 |
| N | 40 | | | | 48 | | | | 64 | | | |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.10 | | | | 0.08 | | | | 0.08 | | | |
| ddd | 0.13 | | | | 0.08 | | | | 0.07 | | | |
| NOTE | 1, 8 | | | | 1, 8 | | | | 1, 8 | | | |
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| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|-----------|------|------|-------|-----------|------|------|-------|-----------|------|------|-------|
| SYMBOL | BCA | | | NOTE | BCB | | | NOTE | BCC | | | NOTE |
| | SQUARE | | | | SQUARE | | | | SQUARE | | | |
| | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | |
| A | ---- | ---- | 1.60 | | ---- | ---- | 1.60 | | ---- | ---- | 1.60 | |
| A1 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 |
| A2 | 1.35 | 1.40 | 1.45 | | 1.35 | 1.40 | 1.45 | | 1.35 | 1.40 | 1.45 | |
| b | 0.35 | 0.42 | 0.50 | 9, 11 | 0.30 | 0.37 | 0.45 | 9, 11 | 0.22 | 0.32 | 0.38 | 9, 11 |
| b1 | 0.35 | 0.40 | 0.45 | 11 | 0.30 | 0.35 | 0.40 | 11 | 0.22 | 0.30 | 0.33 | 11 |
| D | 12.00 BSC | | | 4 | 12.00 BSC | | | 4 | 12.00 BSC | | | 4 |
| D1 | 10.00 BSC | | | 5, 2 | 10.00 BSC | | | 5, 2 | 10.00 BSC | | | 5, 2 |
| e | 1.00 BSC | | | | 0.80 BSC | | | | 0.65 BSC | | | |
| E | 12.00 BSC | | | 4 | 12.00 BSC | | | 4 | 12.00 BSC | | | 4 |
| E1 | 10.00 BSC | | | 5, 2 | 10.00 BSC | | | 5, 2 | 10.00 BSC | | | 5, 2 |
| N | 36 | | | | 44 | | | | 52 | | | |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.10 | | | | 0.10 | | | | 0.10 | | | |
| ddd | 0.20 | | | | 0.20 | | | | 0.13 | | | |
| NOTE | 1, 8 | | | | 1, 8 | | | | 1, 8 | | | |
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| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|-----------|------|------|-------|-----------|------|------|-------|-----------|------|------|-------|
| SYMBOL | BCD | | | NOTE | BCE | | | NOTE | BDA | | | NOTE |
| | SQUARE | | | | SQUARE | | | | SQUARE | | | |
| | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | |
| A | ---- | ---- | 1.60 | | ---- | ---- | 1.60 | | ---- | ---- | 1.60 | |
| A1 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 |
| A2 | 1.35 | 1.40 | 1.45 | | 1.35 | 1.40 | 1.45 | | 1.35 | 1.40 | 1.45 | |
| b | 0.17 | 0.22 | 0.27 | 9, 11 | 0.13 | 0.18 | 0.23 | 9, 11 | 0.35 | 0.42 | 0.50 | 9, 11 |
| b1 | 0.17 | 0.20 | 0.23 | 11 | 0.13 | 0.16 | 0.19 | 11 | 0.35 | 0.40 | 0.45 | 11 |
| D | 12.00 BSC | | | 4 | 12.00 BSC | | | 4 | 14.00 BSC | | | 4 |
| D1 | 10.00 BSC | | | 5, 2 | 10.00 BSC | | | 5, 2 | 12.00 BSC | | | 5, 2 |
| e | 0.50 BSC | | | | 0.40 BSC | | | | 1.00 BSC | | | |
| E | 12.00 BSC | | | 4 | 12.00 BSC | | | 4 | 14.00 BSC | | | 4 |
| E1 | 10.00 BSC | | | 5, 2 | 10.00 BSC | | | 5, 2 | 12.00 BSC | | | 5, 2 |
| N | 64 | | | | 80 | | | | 44 | | | |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.08 | | | | 0.08 | | | | 0.10 | | | |
| ddd | 0.08 | | | | 0.07 | | | | 0.20 | | | |
| NOTE | 1, 8 | | | | 1, 8 | | | | 1, 8 | | | |
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| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|-----------|------|------|-------|-----------|------|------|-------|-----------|------|------|-------|
| SYMBOL | BDB | | | NOTE | BDC | | | NOTE | BDD | | | NOTE |
| | SQUARE | | | | SQUARE | | | | SQUARE | | | |
| | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | |
| A | ---- | ---- | 1.60 | | ---- | ---- | 1.60 | | ---- | ---- | 1.60 | |
| A1 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 |
| A2 | 1.35 | 1.40 | 1.45 | | 1.35 | 1.40 | 1.45 | | 1.35 | 1.40 | 1.45 | |
| b | 0.30 | 0.37 | 0.45 | 9, 11 | 0.22 | 0.32 | 0.38 | 9, 11 | 0.17 | 0.22 | 0.27 | 9, 11 |
| b1 | 0.30 | 0.35 | 0.40 | 11 | 0.22 | 0.30 | 0.33 | 11 | 0.17 | 0.20 | 0.23 | 11 |
| D | 14.00 BSC | | | 4 | 14.00 BSC | | | 4 | 14.00 BSC | | | 4 |
| D1 | 12.00 BSC | | | 5, 2 | 12.00 BSC | | | 5, 2 | 12.00 BSC | | | 5, 2 |
| e | 0.80 BSC | | | | 0.65 BSC | | | | 0.50 BSC | | | |
| E | 14.00 BSC | | | 4 | 14.00 BSC | | | 4 | 14.00 BSC | | | 4 |
| E1 | 12.00 BSC | | | 5, 2 | 12.00 BSC | | | 5, 2 | 12.00 BSC | | | 5, 2 |
| N | 52 | | | | 64 | | | | 80 | | | |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.10 | | | | 0.10 | | | | 0.08 | | | |
| ddd | 0.20 | | | | 0.13 | | | | 0.08 | | | |
| NOTE | 1, 8 | | | | 1, 8 | | | | 1, 8 | | | |
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| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|-----------|------|------|-------|-----------|------|------|-------|-----------|------|------|-------|
| SYMBOL | BDE | | | NOTE | BEA | | | NOTE | BEB | | | NOTE |
| | SQUARE | | | | SQUARE | | | | SQUARE | | | |
| | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | |
| A | ---- | ---- | 1.60 | | ---- | ---- | 1.60 | | ---- | ---- | 1.60 | |
| A1 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 |
| A2 | 1.35 | 1.40 | 1.45 | | 1.35 | 1.40 | 1.45 | | 1.35 | 1.40 | 1.45 | |
| b | 0.13 | 0.18 | 0.23 | 9, 11 | 0.35 | 0.42 | 0.50 | 9, 11 | 0.30 | 0.37 | 0.45 | 9, 11 |
| b1 | 0.13 | 0.16 | 0.19 | 11 | 0.35 | 0.40 | 0.45 | 11 | 0.30 | 0.35 | 0.40 | 11 |
| D | 14.00 BSC | | | 4 | 16.00 BSC | | | 4 | 16.00 BSC | | | 4 |
| D1 | 12.00 BSC | | | 5, 2 | 14.00 BSC | | | 5, 2 | 14.00 BSC | | | 5, 2 |
| e | 0.40 BSC | | | | 1.00 BSC | | | | 0.80 BSC | | | |
| E | 14.00 BSC | | | 4 | 16.00 BSC | | | 4 | 16.00 BSC | | | 4 |
| E1 | 12.00 BSC | | | 5, 2 | 14.00 BSC | | | 5, 2 | 14.00 BSC | | | 5, 2 |
| N | 100 | | | | 52 | | | | 64 | | | |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.08 | | | | 0.10 | | | | 0.10 | | | |
| ddd | 0.07 | | | | 0.20 | | | | 0.20 | | | |
| NOTE | 1, 8 | | | | 1, 8 | | | | 1, 8 | | | |
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| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|-----------|------|------|-------|-----------|------|------|-------|-----------|------|------|-------|
| SYMBOL | BEC | | | NOTE | BED | | | NOTE | BEE | | | NOTE |
| | SQUARE | | | | SQUARE | | | | SQUARE | | | |
| | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | |
| A | ---- | ---- | 1.60 | | ---- | ---- | 1.60 | | ---- | ---- | 1.60 | |
| A1 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 |
| A2 | 1.35 | 1.40 | 1.45 | | 1.35 | 1.40 | 1.45 | | 1.35 | 1.40 | 1.45 | |
| b | 0.22 | 0.32 | 0.38 | 9, 11 | 0.17 | 0.22 | 0.27 | 9, 11 | 0.13 | 0.18 | 0.23 | 9, 11 |
| b1 | 0.22 | 0.30 | 0.33 | 11 | 0.17 | 0.20 | 0.23 | 11 | 0.13 | 0.16 | 0.19 | 11 |
| D | 16.00 BSC | | | 4 | 16.00 BSC | | | 4 | 16.00 BSC | | | 4 |
| D1 | 14.00 BSC | | | 5, 2 | 14.00 BSC | | | 5, 2 | 14.00 BSC | | | 5, 2 |
| e | 0.65 BSC | | | | 0.50 BSC | | | | 0.40 BSC | | | |
| E | 16.00 BSC | | | 4 | 16.00 BSC | | | 4 | 16.00 BSC | | | 4 |
| E1 | 14.00 BSC | | | 5, 2 | 14.00 BSC | | | 5, 2 | 14.00 BSC | | | 5, 2 |
| N | 80 | | | | 100 | | | | 120 | | | |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.10 | | | | 0.08 | | | | 0.08 | | | |
| ddd | 0.13 | | | | 0.08 | | | | 0.07 | | | |
| NOTE | 1, 8 | | | | 1, 8 | | | | 1, 8 | | | |
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| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|-----------|------|------|-------|-----------|------|------|-------|-----------|------|------|-------|
| SYMBOL | BFA | | | NOTE | BFB | | | NOTE | BFC | | | NOTE |
| | SQUARE | | | | SQUARE | | | | SQUARE | | | |
| | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | |
| A | ---- | ---- | 1.60 | | ---- | ---- | 1.60 | | ---- | ---- | 1.60 | |
| A1 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 |
| A2 | 1.35 | 1.40 | 1.45 | | 1.35 | 1.40 | 1.45 | | 1.35 | 1.40 | 1.45 | |
| b | 0.22 | 0.32 | 0.38 | 9, 11 | 0.17 | 0.22 | 0.27 | 9, 11 | 0.13 | 0.18 | 0.23 | 9, 11 |
| b1 | 0.22 | 0.30 | 0.33 | 11 | 0.17 | 0.20 | 0.23 | 11 | 0.13 | 0.16 | 0.19 | 11 |
| D | 22.00 BSC | | | 4 | 22.00 BSC | | | 4 | 22.00 BSC | | | 4 |
| D1 | 20.00 BSC | | | 5, 2 | 20.00 BSC | | | 5, 2 | 20.00 BSC | | | 5, 2 |
| e | 0.65 BSC | | | | 0.50 BSC | | | | 0.40 BSC | | | |
| E | 22.00 BSC | | | 4 | 22.00 BSC | | | 4 | 22.00 BSC | | | 4 |
| E1 | 20.00 BSC | | | 5, 2 | 20.00 BSC | | | 5, 2 | 20.00 BSC | | | 5, 2 |
| N | 112 | | | | 144 | | | | 176 | | | |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.10 | | | | 0.08 | | | | 0.08 | | | |
| ddd | 0.13 | | | | 0.08 | | | | 0.07 | | | |
| NOTE | 1, 8 | | | | 1, 8 | | | | 1, 8 | | | |
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| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|-----------|------|------|-------|-----------|------|------|-------|-------------|------|------|-------|
| SYMBOL | BGA | | | NOTE | BGB | | | NOTE | BHA | | | NOTE |
| | SQUARE | | | | SQUARE | | | | RECTANGULAR | | | |
| | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | |
| A | ---- | ---- | 1.60 | | ---- | ---- | 1.60 | | ---- | ---- | 1.60 | |
| A1 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 |
| A2 | 1.35 | 1.40 | 1.45 | | 1.35 | 1.40 | 1.45 | | 1.35 | 1.40 | 1.45 | |
| b | 0.17 | 0.22 | 0.27 | 9, 11 | 0.13 | 0.18 | 0.23 | 9, 11 | 0.22 | 0.32 | 0.38 | 9, 11 |
| b1 | 0.17 | 0.20 | 0.23 | 11 | 0.13 | 0.16 | 0.19 | 11 | 0.22 | 0.30 | 0.33 | 11 |
| D | 26.00 BSC | | | 4 | 26.00 BSC | | | 4 | 22.00 BSC | | | 4 |
| D1 | 24.00 BSC | | | 5, 2 | 24.00 BSC | | | 5, 2 | 20.00 BSC | | | 5, 2 |
| e | 0.50 BSC | | | | 0.40 BSC | | | | 0.65 BSC | | | |
| E | 26.00 BSC | | | 4 | 26.00 BSC | | | 4 | 16.00 BSC | | | 4 |
| E1 | 24.00 BSC | | | 5, 2 | 24.00 BSC | | | 5, 2 | 14.00 BSC | | | 5, 2 |
| N | 176 | | | | 216 | | | | 100 | | | 7 |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.08 | | | | 0.08 | | | | 0.10 | | | |
| ddd | 0.08 | | | | 0.07 | | | | 0.13 | | | |
| NOTE | 1, 8 | | | | 1, 8 | | | | 1, 7, 8 | | | |
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| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|-------------|------|------|-------|-----------|------|------|-------|-----------|------|------|-------|
| SYMBOL | BHB | | | NOTE | BJA | | | NOTE | BJB | | | NOTE |
| | RECTANGULAR | | | | SQUARE | | | | SQUARE | | | |
| | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | |
| A | ---- | ---- | 1.60 | | ---- | ---- | 1.60 | | ---- | ---- | 1.60 | |
| A1 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 |
| A2 | 1.35 | 1.40 | 1.45 | | 1.35 | 1.40 | 1.45 | | 1.35 | 1.40 | 1.45 | |
| b | 0.17 | 0.22 | 0.27 | 9, 11 | 0.22 | 0.32 | 0.38 | 9, 11 | 0.17 | 0.22 | 0.27 | 9, 11 |
| b1 | 0.17 | 0.20 | 0.23 | 11 | 0.22 | 0.30 | 0.33 | 11 | 0.17 | 0.20 | 0.23 | 11 |
| D | 22.00 BSC | | | 4 | 30.00 BSC | | | 4 | 30.00 BSC | | | 4 |
| D1 | 20.00 BSC | | | 5, 2 | 28.00 BSC | | | 5, 2 | 28.00 BSC | | | 5, 2 |
| e | 0.50 BSC | | | | 0.65 BSC | | | | 0.50 BSC | | | |
| E | 16.00 BSC | | | 4 | 30.00 BSC | | | 4 | 30.00 BSC | | | 4 |
| E1 | 14.00 BSC | | | 5, 2 | 28.00 BSC | | | 5, 2 | 28.00 BSC | | | 5, 2 |
| N | 128 | | | 7 | 160 | | | | 208 | | | |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.08 | | | | 0.10 | | | | 0.08 | | | |
| ddd | 0.08 | | | | 0.13 | | | | 0.08 | | | |
| NOTE | 1, 7, 8 | | | | 1, 8 | | | | 1, 8 | | | |
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| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|-----------|------|------|-------|----------|------|------|-------|----------|------|------|-------|
| SYMBOL | BJC | | | NOTE | BKA | | | NOTE | BKB | | | NOTE |
| | SQUARE | | | | SQUARE | | | | SQUARE | | | |
| | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | |
| A | ---- | ---- | 1.60 | | ---- | ---- | 1.60 | | ---- | ---- | 1.60 | |
| A1 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 | 0.05 | ---- | 0.15 | 12 |
| A2 | 1.35 | 1.40 | 1.45 | | 1.35 | 1.40 | 1.45 | | 1.35 | 1.40 | 1.45 | |
| b | 0.13 | 0.18 | 0.23 | 9, 11 | 0.22 | 0.32 | 0.38 | 9, 11 | 0.17 | 0.22 | 0.27 | 9, 11 |
| b1 | 0.13 | 0.16 | 0.19 | 11 | 0.22 | 0.30 | 0.33 | 11 | 0.17 | 0.20 | 0.23 | 11 |
| D | 30.00 BSC | | | 4 | 6.00 BSC | | | 4 | 6.00 BSC | | | 4 |
| D1 | 28.00 BSC | | | 5, 2 | 4.00 BSC | | | 5, 2 | 4.00 BSC | | | 5, 2 |
| e | 0.40 BSC | | | | 0.65 BSC | | | | 0.50 BSC | | | |
| E | 30.00 BSC | | | 4 | 6.00 BSC | | | 4 | 6.00 BSC | | | 4 |
| E1 | 28.00 BSC | | | 5, 2 | 4.00 BSC | | | 5, 2 | 4.00 BSC | | | 5, 2 |
| N | 256 | | | | 20 | | | | 24 | | | |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.08 | | | | 0.10 | | | | 0.08 | | | |
| ddd | 0.07 | | | | 0.13 | | | | 0.08 | | | |
| NOTE | 1, 8 | | | | 1, 8 | | | | 1, 8 | | | |
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| VARIATIONS | | | | | | | | | | | | |
|---------------------------------|----------|------|------|-------|------|------|------|------|--------|------|------|------|
| SYMBOL | BKC | | | NOTE | | | | NOTE | | | | NOTE |
| | | | | | | | | | SQUARE | | | |
| | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | | MIN. | NOM. | MAX. | |
| A | ---- | ---- | 1.60 | | | | | | | | | |
| A1 | 0.05 | ---- | 0.15 | 12 | | | | | | | | |
| A2 | 1.35 | 1.40 | 1.45 | | | | | | | | | |
| b | 0.13 | 0.18 | 0.23 | 9, 11 | | | | | | | | |
| b1 | 0.13 | 0.16 | 0.19 | 11 | | | | | | | | |
| D | 6.00 BSC | | | 4 | | | | | | | | |
| D1 | 4.00 BSC | | | 5, 2 | | | | | | | | |
| e | 0.40 BSC | | | | | | | | | | | |
| E | 6.00 BSC | | | 4 | | | | | | | | |
| E1 | 4.00 BSC | | | 5, 2 | | | | | | | | |
| N | 32 | | | | | | | | | | | |
| TOLERANCES OF FORM AND POSITION | | | | | | | | | | | | |
| ccc | 0.08 | | | | | | | | | | | |
| ddd | 0.07 | | | | | | | | | | | |
| NOTE | 1, 8 | | | | | | | | | | | |
| REF | 11-483S | | | | | | | | | | | |
| ISSUE | B | | | | | | | | | | | |