CBS 10 and 20 Series Configuration

Available Heights:
- 10 Series: .130" to 2.00" (3.3 to 50.8)
- 20 Series: .200" to 2.00" (5.08 to 50.8)

Recommended hole size: .050" (1.27)

Ventilation Patterns

Standard Options
- Formed fence and cover - unassembled (F)
- Assembled fence and cover (A)
- Flat fence and formed cover (U)
- Pre-tin plated Phos Bronze (P), Alloy 770 (N)
- Ventilation holes (SV 15% or DV 30%)

Ordering a CBS is Easy
1. Select your style number - "21-CBS"
2. Choose standard options listed above - "21-CBSFNSV"
3. Specify your width in .25" increments from .50" to 12.00" - "21-CBSFNSV-2.5x4.5"
4. Specify your length in .25" increments from .50" to 24.00" - "21-CBSFNSV-2.5x4.5"
5. Specify your height from board to inside cover from .13" to 2.00" - "21-CBSFNSV-2.5x4.5x.225"
CBS 40 Series

40 - CBS Series

<table>
<thead>
<tr>
<th>STYLE</th>
<th>FIG.</th>
<th>A HEIGHT</th>
<th>B PIN SPACING</th>
<th>C STANDOFFS</th>
<th>D PIN LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-CBS surface mount</td>
<td>1</td>
<td>.40 (10,16)</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>42-CBS</td>
<td>3</td>
<td>.40 (10,16)</td>
<td>1.0 (25,4)</td>
<td>none</td>
<td>.12 (3,05)</td>
</tr>
<tr>
<td>44-CBS</td>
<td>2</td>
<td>.40 (10,16)</td>
<td>.50 (12,7)</td>
<td>none</td>
<td>.12 (3,05)</td>
</tr>
<tr>
<td>45-CBS</td>
<td>4</td>
<td>.40 (10,16)</td>
<td>1.0 (25,4)</td>
<td>none</td>
<td>.010 (,25)</td>
</tr>
<tr>
<td>47-CBS</td>
<td>4</td>
<td>.40 (10,16)</td>
<td>1.0 (25,4)</td>
<td>none</td>
<td>.010 (,25)</td>
</tr>
<tr>
<td>48-CBS</td>
<td>2</td>
<td>.40 (10,16)</td>
<td>.50 (12,7)</td>
<td>none</td>
<td>.15 (3,81)</td>
</tr>
<tr>
<td>49-CBS</td>
<td>5</td>
<td>.40 (10,16)</td>
<td>.25 (6,35)</td>
<td>none</td>
<td>.12 (3,05)</td>
</tr>
<tr>
<td>49L-CBS</td>
<td>6</td>
<td>.40 (10,16)</td>
<td>.25 (6,35)</td>
<td>.005 (,13)</td>
<td>.12 (3,05)</td>
</tr>
</tbody>
</table>

NOTES
- Drawings in figures 1-6 are not to scale; see chart for sizing
- Standard cover height: .280" (7,11) 40-CBS
- Other cover heights available, consult factory

Ordering a CBS is Easy
1. Select your style number: "42-CBS"
2. Choose standard options listed above - "42-CBSFNSV"
3. Specify your width in .25" increments from .50" to 12.00" - "42-CBSFNSV-2.5x12.0"
4. Specify your length in .25" increments from .50" to 24.00" - "42-CBSFNSV-2.5x24.0"
5. Specify your height from board to inside cover from .40" to 2.00" - "42-CBSFNSV-2.5x24.0-2.0"

40 Series Specs
- Sizes: .50" x .50" to 12" x 24" (.25" increments)
- Shapes: Squares, rectangles and odd shapes in .25" increments
- Heights: .40" to 3.00"
- Mounting Pins: .25", .50" or 1.00" spacing
- Surface Mount: Available for all 40 series CBS
- Std Material: .015" (.38) pre-tin plated steel
- Cover Retention: 1.5 - 2.5 lb./linear inch
- Shielding Effectiveness: up to 60 dB

Standard Options
- Formed fence and cover - unassembled (F)
- Assembled fence and cover (A)
- Flat fence and formed cover (U)
- Pre-tin plated Plus Bronze (P), Alloy 770 (N)
- Ventilation holes (SV 15% or DV 30%)
- Dimples for improved retention (D)

Ventilation Patterns

- Single density and double density ventilation holes available upon request.
- SV/DV (Standard) = .156" dia.  SV2/DV2 (Alternate) = .08" dia.

Mounting Hole Patterns (40 series)

- .25" Pin Pattern
- .50" Pin Pattern
- 1.0" Pin Pattern

Pin pattern viewed from top of shield. Consult factory for pin patterns for your application.

NOTES
- Drawings in figures 1-6 are not to scale; see chart for sizing
- Standard cover height: .280" (7,11) 40-CBS
- Other cover heights available, consult factory

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The Leading Edge in EMI Shielding Technology
**CBS 50 Series**

**Shelf heights from .500”**

### 50-CBS Series

<table>
<thead>
<tr>
<th>Style</th>
<th>Fig.</th>
<th>A Height</th>
<th>B Pin Spacing</th>
<th>C Standoffs</th>
<th>D Pin Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-CBS</td>
<td>1</td>
<td>.50 (.127)</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>51-CBS</td>
<td>5</td>
<td>.50 (.127)</td>
<td>1.0 (.254)</td>
<td>.05 (.127)</td>
<td>.12 (.305)</td>
</tr>
<tr>
<td>52-CBS</td>
<td>4</td>
<td>.50 (.127)</td>
<td>1.0 (.254)</td>
<td>none</td>
<td>.12 (.305)</td>
</tr>
<tr>
<td>52NN-CBS</td>
<td>3</td>
<td>.50 (.127)</td>
<td>1.0 (.254)</td>
<td>.06 (.153)</td>
<td>.12 (.305)</td>
</tr>
<tr>
<td>53-CBS</td>
<td>2</td>
<td>.50 (.127)</td>
<td>.50 (.127)</td>
<td>.05 (.127)</td>
<td>.12 (.305)</td>
</tr>
<tr>
<td>53A-CBS</td>
<td>3</td>
<td>.50 (.127)</td>
<td>.50 (.127)</td>
<td>.06 (.153)</td>
<td>.12 (.305)</td>
</tr>
<tr>
<td>54-CBS</td>
<td>2</td>
<td>.50 (.127)</td>
<td>.50 (.127)</td>
<td>none</td>
<td>.12 (.305)</td>
</tr>
<tr>
<td>55-CBS</td>
<td>5</td>
<td>.50 (.127)</td>
<td>1.0 (.254)</td>
<td>.01 (.025)</td>
<td>.12 (.305)</td>
</tr>
<tr>
<td>56-CBS</td>
<td>5</td>
<td>.50 (.127)</td>
<td>1.0 (.254)</td>
<td>.05 (.127)</td>
<td>.15 (.381)</td>
</tr>
<tr>
<td>57-CBS</td>
<td>5</td>
<td>.50 (.127)</td>
<td>1.0 (.254)</td>
<td>.01 (.025)</td>
<td>.15 (.381)</td>
</tr>
<tr>
<td>58-CBS</td>
<td>2</td>
<td>.50 (.127)</td>
<td>.50 (.127)</td>
<td>none</td>
<td>.15 (.381)</td>
</tr>
<tr>
<td>59-CBS</td>
<td>6</td>
<td>.50 (.127)</td>
<td>1.25 (.318)</td>
<td>none</td>
<td>12 (.305)</td>
</tr>
</tbody>
</table>

**NOTES**

- Drawings in figures 1-6 are not to scale; see chart for sizing.
- Standard cover height: .280” (.711) 50-CBS
- Other cover heights available; consult factory.
- *52NN-CBS has no u-notch as depicted in fig. 4.

**50 Series Specs**

- **Sizes**: .50” x .50” to 12” x 24” (.25 increments)
- **Shapes**: Squares, Rectangles and Odd Shapes in .25 increments
- **Heights**: .50” to 3.00”
- **Mounting Pins**: .25”, .50” or 1.00” spacing
- **Surface Mount**: Available for all 50 series CBS
- **Std Material**: 0.015” (.38) pre-tin plated steel
- **Cover Retention**: 1.5 - 2.5 lb./linear inch
- **Shielding Effectiveness**: up to 60 dB

**Standard Options**

- **Formed fence and cover - unassembled (F)**
- **Assembled fence and cover (A)**
- **Flat fence and formed cover (U)**
- **Pre-tin plated Phos Bronze (P), Alloy 770 (N)**
- **Ventilation holes (SV 15% or DV 30%)**
- **Dimples for improved retention (D)**

**Ordering a CBS is Easy**

1. Select your style number - “51-CBS”
2. Choose standard options listed above - “51-CBSFNSV”
3. Specify your width in .25” increments from .50” to 12.00” - “51-CBSFNSV-2.5”
4. Specify your length in .25” increments from .50” to 24.00” - “51-CBSFNSV-2.5x4.5”
5. Specify your height from board to inside cover from .50” to 2.00” - “51-CBSFNSV-2.5x4.5x50”

**Ventilation Patterns**

Single density and double density ventilation holes available upon request.

### BV Pattern .156” Hole

### SV Pattern .156” Hole

**Mounting Hole Patterns (50 series)**

- **.25” Pin Pattern**
- **.50” Pin Pattern**
- **1.0” Pin Pattern**

Pin pattern viewed from top of shield. Consult factory for pin patterns for your application.

---

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**CBS 80 Series**

Shield heights from .80”

<table>
<thead>
<tr>
<th>STYLE</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-CBS</td>
<td>.80 (20.3)</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>87-CBS</td>
<td>.80 (20.3)</td>
<td>.50 (12.7)</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>84-AH</td>
<td>.80 (20.3)</td>
<td>.50 (12.7)</td>
<td>none</td>
<td>.12 (3.05)</td>
</tr>
<tr>
<td>84-CBS</td>
<td>.80 (20.3)</td>
<td>.50 (12.7)</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>84-AH</td>
<td>.80 (20.3)</td>
<td>.50 (12.7)</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>84-CBS</td>
<td>.80 (20.3)</td>
<td>.50 (12.7)</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>84-AH</td>
<td>.80 (20.3)</td>
<td>.50 (12.7)</td>
<td>none</td>
<td>none</td>
</tr>
</tbody>
</table>

**NOTES**
- Drawings in figures 1-8 are not to scale; see chart for sizing.
- Standard cover height: .280”.
- Other cover heights available, consult factory.

**80-CBS Series**

Black = inches, Red = mm

**80 Series Specs**
- Sizes: .50” x .50” to 12” x 24” (.25” increments)
- Shapes: Squares, rectangles and odd shapes in .25” increments
- Heights: .80” to 4.00”
- Mounting Pins: .25”, .50” or 1.00” spacing
- Surface Mount: Available for all 80 series CBS
- Std Material: .015” (.38) pre-tin plated steel
- Cover Retention: 1.5 - 2.5 lb./linear inch
- Shielding Effectiveness: up to 60 dB

**Standard Options**
- Formed fence and cover - unassembled (F)
- Assembled fence and cover (A)
- Flat fence and formed cover (G)
- Pre-tin plated Phos Bronze (P), Alloy 770 (N)
- Ventilation holes (SV 15% or DV 30%)
- Dimples for improved retention (D)

**Ordering a CBS is Easy**

1. Select your style number - “81-CBS”
2. Choose standard options listed above - “81-CBS”
3. Specify your width in .25” increments from .50” to 12.00” - “81-CBSFNSV-2.5x12”
4. Specify your length in .25” increments from .50” to 24.00” - “81-CBSFNSV-2.5x24”
5. Specify your height from board to inside cover from .80” to 2.00” - “81-CBSFNSV-2.5x4.5x80”

**Ventilation Patterns**

Single density and double density ventilation holes available upon request.
- SV/DV (Standard) = .156” dia.
- SV/DV2 (Alternate) = .08” dia.

**Mounting Hole Patterns (80 series)**

**Surface Mount**

- 3/8” Pin Spacing, No Dimples, No Hole

**Pin Pattern**

- .25” Pin Pattern
- .50” Pin Pattern
- 1.0” Pin Pattern

Pin pattern viewed from top of shield. Consult factory for pin patterns for your application.

**DIMPLES AVAILABLE UPON REQUEST**

**AVAILABLE HEIGHTS:**

80 SERIES: .80” TO 2.0” (20.3 TO 50.5)

Recommended hole size: .050” (1.27)
Engineered 6-sided Shield Enclosure

The versatile 6-sided CBS2 Shielding Box can be mounted on any side or orientation. We recommend the use of GRIP-SERT style threaded inserts. These inserts are completely threaded, enabling them to be utilized both as a method of exterior box attachment and for PCB attachment inside of the shielding box. This allows the use of CBS2 shielding boxes in a wide variety of unique mounting applications.

These highly versatile inserts deliver high torque-out resistance and high pull-out values in our standard .015” pre-tin plated steel or pre-tin plated Phos Bronze (P).

Design

The Leader Tech CBS2 consists of the following:

- (1) fence using proven cover retention fingers on both sides
- (2) covers with height and features to be specified

CBS2 Series

<table>
<thead>
<tr>
<th>STYLE</th>
<th>FIG.</th>
<th>A HEIGHT</th>
<th>PACKAGE HEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBS2</td>
<td>1</td>
<td>.800</td>
<td>.840 min. - 2.240 max</td>
</tr>
</tbody>
</table>

NOTES: Drawing in Figure 1 is not to scale; see chart for sizing.

CBS2 Series Specs

Material Options

- Pre-tin plated steel
- Pre-tin plated Phos Bronze (P)
- Mu metal
- Alloy 770

Shapes

- Square
- Rectangle
- L-shape
- T-shape

Optional Features

- I/O cutouts
- Mounting hardware for PCB
- Ventilation holes
- Locking dimples

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