

## Diverse board-level shielding solutions for all electronic applications

Leader Tech is not a one-product-fits-all company. We are innovators focused on constant improvement and refinement of proven product platforms and manufacturing methods. This allows us to deliver cost-effective shielding solutions that solve EMI problems for both current and emerging electronic applications.

From small footprints and low-profile applications to multi-level board designs, we offer a wide selection of standard, modified standard and custom board level shielding products to fit your exact specifications.

Four of the Leader Tech's most popular product lines are described below. Additionally, the product comparison chart allows for "at-a-glance" comparisons of all design options.

### Leader Tech Standard CBS

#### Simply one of the best shields ever made.

Our standard CBS products lead the board-level shielding industry in performance, flexibility and value. The highly reliable 2-piece design (fence and cover) accommodates virtually any through-hole or surface mount application.

### Multi-Cavity designs

#### When space, weight and costs are all design priorities.

Our flexible CBS and Slot Lok design and manufacturing processes allow engineers to effectively isolate multiple components using the same shield. The custom designed product typically incorporates multiple internal cavities that share connecting walls and a single cover. This allows for a reduction in shield weight and occupied board space.

### Slot-Lok™ Shields

#### As close to custom as you can get...without the cost!



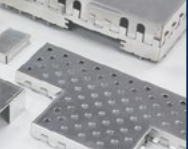

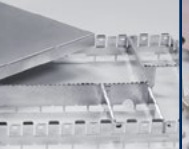
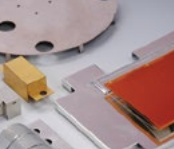
Slot-Lok™ shields are designed and manufactured using proprietary methods that increase shield design flexibility while reducing lead time and total product cost. If you need a cost-effective shielding solution with near limitless design flexibility, Slot-Lok™ is the option of choice.

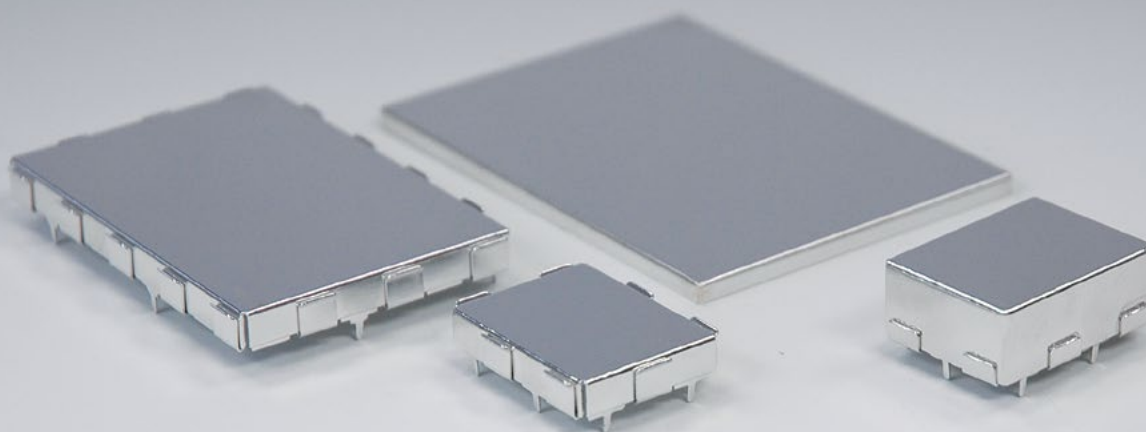
### Custom shielding solutions

#### If you can describe it, we can manufacture it.

Decades of engineering and manufacturing experience provide you with the ultimate board level shielding flexibility. From 3D modeling, material selection and prototyping to high volume production, we are with you every step of the way.

## Product Comparison Chart

						
PARAMETERS	STD. CBS	KE CBS	MODIFIED STD.	SLOT-LOK™	MULTI-CAVITY	CUSTOM
Through-Hole	Yes	Yes	Yes	Yes	Yes	Yes
Surface Mount	Yes	Yes	Yes	Yes	Yes	Yes
Height Flexibility	0.13"-4.0"	0.40"-2.0"	0.13"-4.0"	.080"-2.0"	0.10"-2.0"	from .080"
Design Flexibility	Good	Good	Very Good	Very Good	Very Good	Excellent
Material Flexibility	Very Good	Very Good	Very Good	Very Good	Very Good	Excellent
Shielding Effectiveness	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Cover Retention	Excellent	Excellent	Excellent	Very Good	Very Good	Excellent
Tooling/NRE	None	None	Low	Low	Low-Med	Low-Med
Lead-Times	Excellent	Excellent	Excellent	Very Good	Very Good	Very Good
RoHS Compliant	Yes	Yes	Yes	Yes	Yes	Yes



## 10 - CBS Series

Black = inches Red = mm

STYLE	FIG.	A HEIGHT	B PIN SPACING	C STANDOFFS	D PIN LENGTH
10-CBS surface mount	1	.13 (3,30)	none	none	none
14-CBS	5	.13 (3,30)	1.0 (25,4)	none	.05 (1,27)
14R-CBS	3	.13 (3,30)	.50 (12,7)	none	.10 (2,54)
14RA-CBS	3	.13 (3,30)	.50 (12,7)	none	.05 (1,27)
18R-CBS	3	.13 (3,30)	.50 (12,7)	none	.13 (3,30)

## 20 - CBS Series

Black = inches Red = mm

STYLE	FIG.	A HEIGHT	B PIN SPACING	C STANDOFFS	D PIN LENGTH
20-CBS surface mount	1	.200 (5,08)	none	none	none
20S-CBS surface mount	2	.200 (5,08)	.50 (12,7) pad spacing	none	.21L (5,33) .075W (1,90)
21L-CBS	4	.225 (5,72)	.50 (12,7)	.025 (.63)	.15 (3,81)
21M-CBS	4	.225 (5,72)	.50 (12,7)	.025 (.63)	.13 (3,30)
21-CBS	4	.225 (5,72)	.50 (12,7)	.025 (.63)	.10 (2,54)
22-CBS	5	.200 (5,08)	1.0 (25,4)	none	.10 (2,54)
23-CBS	4	.250 (6,35)	.50 (12,7)	.050 (1,27)	.10 (2,54)
24-CBS	3	.200 (5,08)	.50 (12,7)	none	.10 (2,54)
24S-CBS	3	.200 (5,08)	.50 (12,7)	none	.05 (1,27)
25-CBS	6	.225 (5,72)	1.0 (25,4)	.025 (.63)	.10 (2,54)
29-CBS	3	.200 (5,08)	.50 (12,7)	none	.13 (3,30)

### NOTES

- Drawings in figures 1-6 are not to scale; see chart for sizing
- Standard material .015" (.38) pre-tin plated steel
- Other cover heights available, consult factory
- Standard cover height: .115" (2,92) 10-CBS  
.185" (4,70) 20-CBS

FIGURE 1 Surface Mount

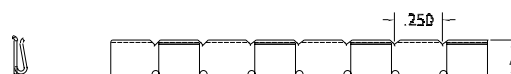


FIGURE 2 .50" Surface Mount Pad Spacing, No Standoff

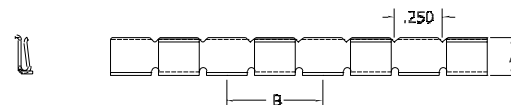


FIGURE 3 .50" Pin Spacing, No Standoff

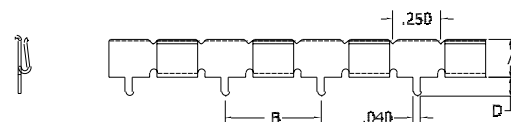


FIGURE 4 .50" Pin Spacing, With Standoff

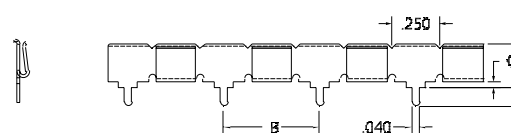


FIGURE 5 1.0" Pin Spacing, No Standoff

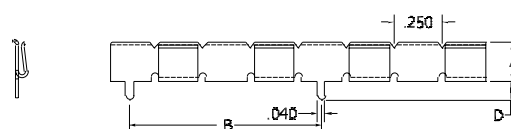
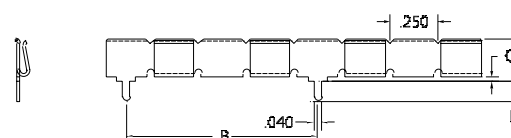
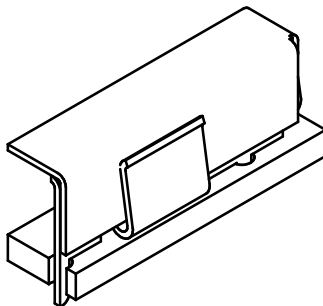
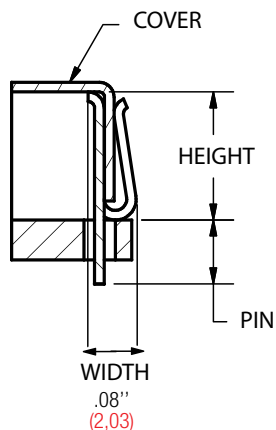


FIGURE 6 1.0" Pin Spacing, With Standoff



## CBS 10 and 20 Series Configuration

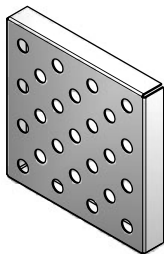
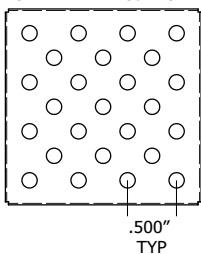


AVAILABLE HEIGHTS:

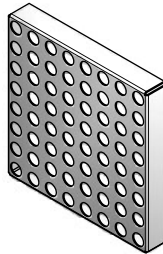
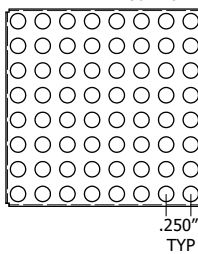
10 SERIES - .13" TO 2.0" (3,3 TO 50,8) 20 SERIES - .20" TO 2.0" (5,08 TO 50,8)  
Recommended hole size: .050" (1,27)

## Ventilation Patterns

SV PATTERN .156" HOLE

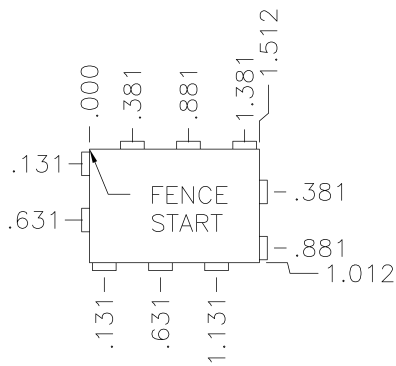


DV PATTERN .156" HOLE

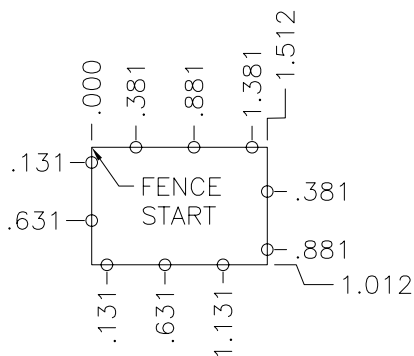


Single density and double density ventilation holes available upon request.  
SV/DV (Standard) = .156" dia. SV2/DV2 (Alternate) = .08" dia.

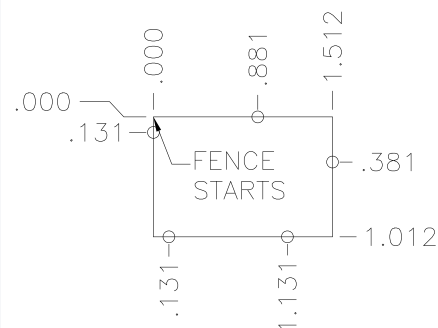
## Mounting Hole Patterns (10 and 20 series)



**20S-CBS Foot Pattern**



**.50" Pin Pattern**



**1.0" Pin Pattern**

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

## 10 and 20 Series Specs

**Sizes:** .50" x .50" to 12" x 24" (.25" increments)

**Shapes:** Squares, rectangles and odd shapes in .25" increments

**Heights:** .13" to 2.00"

**Mounting Pins:** .50" or 1.00" spacing

**Surface Mount:** Available for all 10 and 20 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 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-2.5"**
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"**