

# PROJECT ENCLOSURES



HAMMOND  
MANUFACTURING™

## MINI-ABS CASES



Black or gray ABS plastic with interlocking lid. Integral standoffs for pc board mounting. Lid held in place with self-tapping #4 screws (included).

### 1.97" x 1.38" x 0.8"

|                       |       |              |
|-----------------------|-------|--------------|
| <b>CAT # 1551-GGY</b> | Gray  | \$ 1.90 each |
| <b>CAT # 1551-GBK</b> | Black | \$ 1.90 each |

### 2.36" x 1.38" x 0.8"

|                       |       |              |
|-----------------------|-------|--------------|
| <b>CAT # 1551-HGY</b> | Gray  | \$ 2.25 each |
| <b>CAT # 1551-HBK</b> | Black | \$ 2.25 each |

### 3.15" x 1.57" x 0.8"

|                       |       |              |
|-----------------------|-------|--------------|
| <b>CAT # 1551-KGY</b> | Gray  | \$ 2.35 each |
| <b>CAT # 1551-KBK</b> | Black | \$ 2.35 each |

## GENERAL PURPOSE CASES

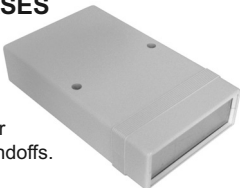
Black ABS cases with countersunk lid secured with self-tapping screws. Slots for mounting pc boards.



| CAT #            | Dimensions w/o lid | 1-9  | 10+  |
|------------------|--------------------|------|------|
| <b>1591-MSBK</b> | 3.3" x 2.2" x 0.8" | 3.50 | 3.25 |
| <b>1591-ASBK</b> | 3.9" x 2.0" x 0.8" | 3.75 | 3.50 |
| <b>1591-BSBK</b> | 4.4" x 2.4" x 1.1" | 4.30 | 4.10 |
| <b>1591-CSBK</b> | 4.7" x 2.6" x 1.4" | 4.65 | 4.35 |

## INSTRUMENT CASES

Gray ABS plastic. Two piece tongue and groove construction. 0.064" brushed aluminum front and rear panels. Integral pc standoffs. Front and rear vertical pc board guides.



| CAT #            | Dimensions           | 1-9   | 10+  |
|------------------|----------------------|-------|------|
| <b>1598-ASGY</b> | 6.1" x 3.65" x 1.36" | 9.10  | 8.50 |
| <b>1598-BSGY</b> | 5.26" x 5.3" x 2"    | 10.00 | 9.60 |

## CASES w/ BATTERY COMPARTMENTS

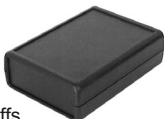
Black ABS plastic cases with removable front panels and panel for battery compartment. Integral pc board standoffs. Includes self-tapping screws. 9V batteries won't fit in CAT#s 1593-SBK & TBK.



| CAT #           | Dimensions           | 1-9  | 10+  |
|-----------------|----------------------|------|------|
| <b>1593-PBK</b> | 2.6" x 3.54" x 1.1"  | 4.15 | 3.95 |
| <b>1593-QBK</b> | 2.6" x 4.4" x 1.1"   | 4.75 | 4.55 |
| <b>1593-SBK</b> | 2.6" x 3.6" x 0.83"  | 4.10 | 3.85 |
| <b>1593-TBK</b> | 2.6" x 4.35" x 0.83" | 4.50 | 4.30 |
| <b>1593-YBK</b> | 2.6" x 5.45" x 1.1"  | 5.10 | 4.85 |

## ABS PROJECT BOX

Hammond # 1593LBK  
2.6" x 1.06" x 3.59" black ABS plastic case with removable front panels. Integral pc board standoffs. Includes self-tapping screws.



**CAT# 1593-LBK**  
\$4.25 each • 10 for \$3.90 each

## DIECAST ALUMINUM ENCLOSURES

Aluminum enclosure with countersunk lid that machine screws into drilled and tapped holes. Lap joint construction provides protection from dust and water.



1.99" x 1.99" x 1.23"  
**CAT# 1590-LB** \$7.25 each  
10 for \$6.80 each

3.64" x 1.52" x 1.23"  
**CAT# 1590-A** \$7.05 each  
10 for \$6.65 each

4.39" X 2.34" X 1.23" **CAT# 1590-B**  
\$8.40 each • 10 for \$7.90 each

4.67" x 3.68" x 1.33" **CAT# 1590-BB**  
\$11.00 each • 10 for \$10.50 each

4.67" x 3.68" x 1.33". Black finish.  
**CAT# 1590-BBBK** ~~\$14.25~~  
\$12.75 each • 10 for \$12.25 each

REDUCED  
PRICE!

## ECONOMY PROJECT BOXES

Black ABS plastic project enclosure. Interlocking lid secured with self-tapping screws. Interior slots for pc boards. Includes hardware.



2.51" x 1.73" x 1.25"  
**CAT# MB-131** \$2.50 ea. • 10 for \$2.25 ea.

3.97" X 2.12" X 1.72"  
**CAT# MB-132** \$3.00 ea. • 10 for \$2.75 ea.

4" x 3" x 1.6"  
**CAT# MB-173** \$3.00 ea. • 10 for \$2.65 ea.

5.3" x 3" x 1.9"  
**CAT# MB-113** \$4.50 ea. • 10 for \$4.00 ea.

## SNAP-TOGETHER PROJECT BOXES

Two or three piece black ABS enclosures.

**1.46" X 1.06" X 0.67"**  
Black ABS plastic project box, 1.46" x 1.06" x 0.67" high. Bottom snap-fits tightly into place. 0.71" x 0.22" slot in one side of box.  
**CAT# MB-95** \$1.25 each • 10 for \$1.10 each



**2.1" x 1.61" x 0.89"**  
3-pieces. Bottom and one (long) side snap-fit in place. Mounting ears with holes on 2.6" centers.  
**CAT# MB-96** \$1.55 each  
10 for \$1.35 each



**3.56" x 1.50" x 1.20"**  
Bottom snap-fits into place. Mounting ears with holes on 3.9" centers. 0.25" x 0.43" opening near the bottom of one long side.  
**CAT# MB-97** \$1.95 each  
10 for \$1.70 each



## UTILITY ENCLOSURE

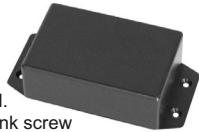
Flame retardant ABS UL94-VO.  
2.74" x 1.99" x 0.83". Four screws.

**CAT# MBU-906**  
\$3.00 each • 10 for \$2.85 each



## BOXES WITH MOUNTING FLANGES

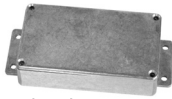
High-impact ABS plastic utility boxes. Black textured finish. Interlocking lid held in place with screws. Interior card guides for 1.6mm thick pc board. Mounting flange has counter-sunk screw holes and adds 1" to 1.25" to overall length of box. Three sizes available:



| Interior Dimensions | CAT#          | Price       |
|---------------------|---------------|-------------|
| 3.1" x 2.0" x 1"    | <b>MBF-20</b> | \$2.75 each |
| 4.9" x 2.5" x 1.6"  | <b>MBF-22</b> | \$3.50 each |
| 6.0" x 3.5" x 1.9"  | <b>MBF-24</b> | \$5.45 each |

## ALUMINUM CHASSIS BOXES

Diecast aluminum alloy chassis box with mounting flanges. Lap joint construction. Interior card slots. Self-adhesive gasket provides protection against dust and moisture.



| Outside Dimensions | CAT#          | each    |
|--------------------|---------------|---------|
| 114 x 64 x 30mm    | <b>MBX-13</b> | \$13.00 |
| 114 x 89 x 55mm    | <b>MBX-25</b> | \$19.00 |
| 171 x 121 x 106mm  | <b>MBX-39</b> | \$35.00 |
| 222 x 146 x 55mm   | <b>MBX-11</b> | \$39.00 |

## ENCLOSURES W/ ALUMINUM COVERS

Heavy-duty 3/32" molded plastic boxes with brushed aluminum covers. Built in stand-offs for P.C. or perf boards. Includes screws. Solderable perf boards PC-1, 2, 3, 4 listed below fit these cases.



|                      |                  |             |                    |
|----------------------|------------------|-------------|--------------------|
| 2.7" x 1.7" x 1.2" H | <b>CAT# TB-1</b> | \$1.90 each | 10 for \$1.75 each |
| 3.3" x 2.1" x 1.4" H | <b>CAT# TB-2</b> | \$2.25 each | 10 for \$2.10 each |
| 4.2" x 2.7" x 1.6" H | <b>CAT# TB-3</b> | \$2.75 each | 10 for \$2.50 each |
| 5.3" x 3.3" x 1.6" H | <b>CAT# TB-4</b> | \$3.50 each | 10 for \$3.20 each |

## SOLDERABLE BREADBOARDS

Perf board with mounting holes designed to fit our project enclosures TB-1,2,3 and 4. Boards have holes on 0.1" matrix to fit most standard components and have copper solder rings on one side.

1 1/2" X 1 3/4". Fits TB-1 enclosure.

**CAT# PC-1** 75¢ each

1 7/8" X 2 1/4". Fits TB-2 enclosure.

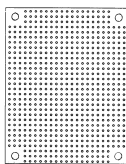
**CAT# PC-2** \$1.00 each

2 1/2" X 3 1/8". Fits TB-3 enclosure.

**CAT# PC-3** \$1.50 each

3" X 4 1/4". Fits TB-4 enclosure.

**CAT# PC-4** \$2.00 each



REDUCED PRICES!

## SOLDERABLE PERF BOARDS WITH SOLDER PADS & BUSS STRIPS

160 X 100mm (except for CAT# ECS-6) multilayer epoxy boards with copper pattern on one side. Five useful patterns for SIP and DIP components. Holes on 0.1" centers.

### SINGLE HOLE PADS

**CAT # ECS-1** \$5.00 each



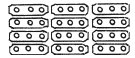
### TWO HOLE PADS

**CAT # ECS-2** \$5.00 each



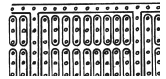
### THREE HOLE PADS

**CAT # ECS-3** \$5.00 each



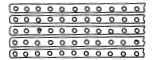
### IC PATTERN WITH PADS AND BUSS STRIPS

**CAT # ECS-5** \$5.00 each



### SOLID LINE PATTERN

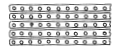
**CAT # ECS-4** \$5.00 each



### SOLID LINE PATTERN

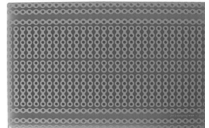
80 x 100mm

**CAT # ECS-6** \$3.50 each



## SOLDERABLE BREADBOARDS

Breadboards with the same pattern and spacing as our solderless breadboards, CATs# PB-400 and PB-840. Transfer your parts and wires, keeping the same layout to get a long-lasting prototype with reliable solder connections. High-quality FR4 glass epoxy PC board. CAT# SB-300 has the same pattern as SB-400 without the bus strips on each side.



|           |                    |             |
|-----------|--------------------|-------------|
| 300 point | <b>CAT# SB-300</b> | \$4.00 each |
| 400 point | <b>CAT# SB-400</b> | \$5.00 each |
| 800 point | <b>CAT# SB-800</b> | \$6.50 each |

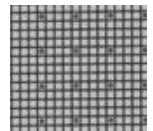
## BREADBOARDS FOR SURFACE MOUNT PARTS

Solderable circuit boards for surface mount components. A solid ground plane on the back of the board provides an easy way to make ground connections and helps lower noise for RF and high-speed circuits. Unplated holes are provided at regular intervals for easy connection to the ground plane. Just insert wire and solder both sides. Standard Eurocard/VME size, 100 x 160mm. 0.8mm thick. High-quality, double-sided FR4 glass-epoxy pc board.

### SMT PADS

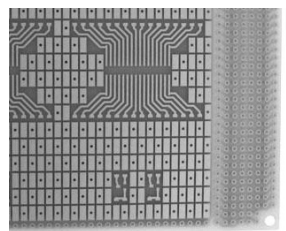
Grid of 42 mil square pads on 50 mil centers allows SMT components of various sizes and pitches to be mounted. SOIC (50 mil pitch) and DIP (100 mil pitch) ICs can be soldered directly to the pads without adapters.

**CAT# SB-3T** \$12.50 each



### SMT PATTERNS AND PADS

For 0805, 1206, SOIC, SOT and other SMT parts. It has three SOIC-32 footprints, each routed to 32 pads. The SMT rectangle pads are spaced for 0805 and 1206 components.



A through-hole area is provided for power connectors and DIP ICs.

**CAT# SB-SMT** \$12.50 each