

**SERIES 860** 

# **MOUSEBUD**<sup>™</sup> *✓* The snap-lock, trigger-release connector

ULTRA LOW-PROFILE • SPRING-LOADED CONTACTS • HARSH-ENVIRONMENT

**PRE-RELEASE SNEAK PEEK • OCTOBER 2014** 



## SERIES 860 MouseBud<sup>™</sup>

## The snap-lock, trigger-release connector

Ultra low-profile MouseBud<sup>™</sup> connectors are lightweight, shielded and designed for use in hostile environments. Mating is a snap—simply push to mate and lock. To release, actuate the thumb trigger on the coupling ring. Plugs feature spring-loaded gold plated contacts, stainless steel shells and self-actuating bayonet coupling rings. Cable mount versions are fully assembled, shielded, overmolded and 100% tested. MouseBud is fully protected from sand and dust, moisture ingress, electromagnetic interference and a multitude of other environmental stresses. The spring-loaded contact system is rated for 2000 mating cycles. Series 860 connectors are suitable for high-speed data, power, video and audio.

Panel mount MouseBud receptacles with "hot shoe" type contacts are suitable for hostile environments including soldier wearable electronics and tactical gear. Contacts are easy to clean and damage-resistant. These receptacle connectors meet MIL-STD-810G requirements for reliable performance in hostile environments both mated and unmated. Connector attaches to panel with a stainless steel jam nut. A fluorosilicone O-ring provides panel sealing. Terminate to flex circuits with PC tail terminals, or choose solder cup terminals for wire attachment.





The MouseBud right angle plug features a single piece "cobra style" connector shell and a tightly fitting lid. A rubber gasket is sandwiched between the shell and lid to prevent moisture intrusion. The total height when mated to a rear panel mounted receptacle is well under 1/2 inch.

Overmolded MouseBud cordsets are available in two standard versions. Style 1 cordsets feature thermoplastic polyurethane cable jackets and polyamide overmolding. Style 2 cordsets with thermoplastic rubber (TPV) cable jackets and overmolding offer excellent cold bend performance down to -55° C.



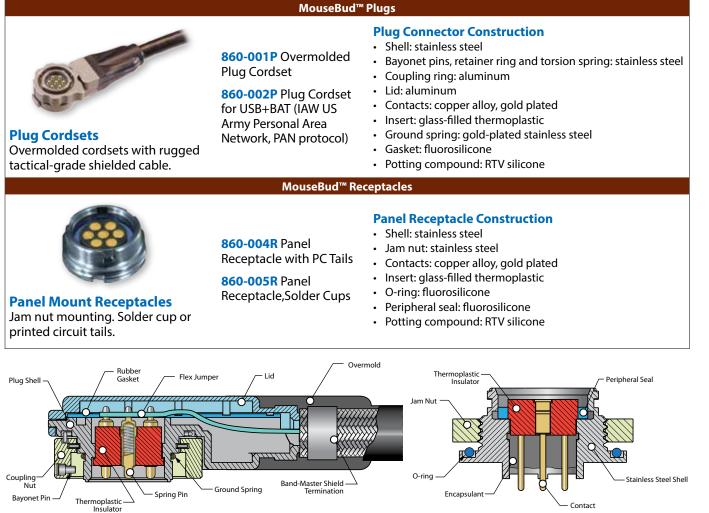


- Self-locking autocoupling, trigger-release mechanism
- Spring-loaded pins for extended durability and easy cleaning
- One meter, one hour water immersion
- 2000 cycles mechanical life
- High-speed data, power, video, and audio applications
- Meets MIL-STD-810G shock, vibration, immersion
- EMI protected with integral backshell and ground spring
- Ultra low-profile and lightweight

## series 860 **MouseBud**™

## The snap-lock, trigger-release connector





#### **Overmolded Plug Cordset**

**Panel Receptacle** 



Glenair MouseBud snap-lock, trigger-release connectors feature a spring-loaded contact system for excellent resistance to damage and debris entrapment. The biased plunger is machined from solid copper alloy for improved strength, durability, and electrical performance compared to plungers drawn from sheet metal.

| MouseBud Specifications              |  |  |  |  |  |  |  |
|--------------------------------------|--|--|--|--|--|--|--|
| Voltage rating                       | 500 VAC  |  |  |  |  |  |  |
| Current rating                       | 5 amps   |  |  |  |  |  |  |
| Contact resistance                   | 20 milliohms maximum                           |  |  |  |  |  |  |
| Plug-to-receptacle ground resistance | <5 milliohm                                    |  |  |  |  |  |  |
| Maximum wire size                    | #24 AWG  |  |  |  |  |  |  |
| Insulation resistance                | 5000 megohms min.                              |  |  |  |  |  |  |
| Water immersion                      | MIL-STD-810 Method 512, one meter for one hour |  |  |  |  |  |  |
| Durability                           | 2000 mating cycles                             |  |  |  |  |  |  |
| Corrosion resistance                 | 1000 hours                                     |  |  |  |  |  |  |
| Sine vibration                       | EIA-364-28 condition IV, 20g peak              |  |  |  |  |  |  |
| Random vibration                     | EIA-364-28 condition V letter H, 29g rms       |  |  |  |  |  |  |
| Shock                                | EIA-364-27 condition D, 300g peak              |  |  |  |  |  |  |
| EMI shielding effectiveness          | 40 dB minimum to 10 GHz                        |  |  |  |  |  |  |



## 860-001P Plug Cordsets



#### Specifications

- Operating temperature: -30°C to +105°C (cordset style 1) -55°C to +125°C (cordset style 2)
- Dielectric withstanding voltage: 500 VAC
- Current rating: 5 A
- Contact resistance: 20 milliohms
- Water immersion: MIL-STD-810G Meth. 512.5
- Ingress protection: IP67
- Mechanical life: 5000 cycles

#### **Connector Construction**

- Shell: stainless steel
- Bayonet pins, retainer ring and torsion spring: stainless steel
- Coupling ring: aluminum
- Lid: aluminum
- Contacts: copper alloy, gold plated
- Insert: glass-filled thermoplastic
- Ground spring: gold-plated stainless steel
- Gasket: fluorosilicone
- Potting compound: RTV silicone

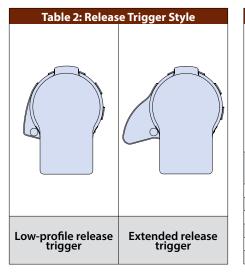
#### **Cable Construction**

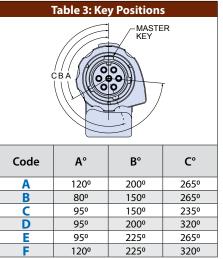
- Wires: silver-coated copper, TFE insulation
- Overmold: polyamide or thermoplastic elastomer
- shield: tin-coated copper microfilament, 90° minimum optical coverage
- Jacket: thermoplastic polyurethane (TPU) or thermoplastic elastomer (TPV)

| Table 1: Contact Arrangements |                                       |  |                |  |  |  |  |  |  |
|-------------------------------|---------------------------------------|--|----------------|--|--|--|--|--|--|
|                               | <b>2</b><br><b>3</b><br><b>4</b><br>7 | <b>V</b><br><b>O</b><br><b>O</b><br><b>O</b><br><b>O</b><br><b>O</b><br><b>O</b><br><b>O</b><br><b>O</b><br><b>O</b><br><b>O</b> |                |  |  |  |  |  |  |
| Contact<br>Arr.               | <b>B7</b>                             | Contact<br>Arr.  | <b>C10</b>     |  |  |  |  |  |  |
| # of<br>Contacts              | 7                                     | # of<br>Contacts   | 10             |  |  |  |  |  |  |
| Contact<br>Diameter           | .038<br>(0.96)                        | Contact<br>Diameter  | .038<br>(0.96) |  |  |  |  |  |  |
| Current<br>Rating             | 5A                                    | Current<br>Rating  | 5A             |  |  |  |  |  |  |

860-001P MouseBud<sup>™</sup> harsh environment cordsets are overmolded, shielded and 100% tested. High-performance cable is equipped with a braided tinned copper shield with 90% minimum optical coverage. Shield is terminated to connector with a stainless steel Band-Master<sup>®</sup> ATS strap. Ultra-lightweight, low profile and water-resistant. Auto-coupling mechanism—simply push to mate and lock. To release, actuate thumb trigger on coupling ring. Style 2 cordset with thermoplastic rubber jacket and overmold has excellent cold bend performance to -55° C. Connectors feature spring-loaded gold plated contacts, stainless steel shells and self-actuating bayonet coupling rings. 5A current rating, 500VAC dielectric withstanding voltage rating.

| How To Order                       |   |  |  |  |  |  |  |  |  |
|------------------------------------|---|--|--|--|--|--|--|--|--|
|                                    | 860-001P- B7 ZR 1 A 2 4- 3  |  |  |  |  |  |  |  |  |
| Product                            | 860-001P = overmolded MouseBud<br>cordset   |  |  |  |  |  |  |  |  |
| Contact Arrangement<br>(Table 1)   | <b>B7</b> = seven contacts, size B shell<br><b>C10</b> = ten contacts, size C shell   |  |  |  |  |  |  |  |  |
| Finish                             | M = electroless NI<br>MT = Nickel-PTFE<br>ZR = Black zinc-nickel  |  |  |  |  |  |  |  |  |
| Release Trigger Style<br>(Table 2) | 1 = Standard low-profile release trigger (fig. 1)<br>2 = Extended release trigger (fig. 2)  |  |  |  |  |  |  |  |  |
| Key Position (Table 3)             |   |  |  |  |  |  |  |  |  |
| Cordset Style (Table 4)            | <ul> <li>1 = polyurethane cable jacket with polyurethane overmold</li> <li>2 = polyurethane cable jacket with polyamide overmold</li> <li>3 = rubber cable jacket with rubber overmold</li> </ul> |  |  |  |  |  |  |  |  |
| Wire Size (AWG)                    | <b>4</b> = #24<br><b>8</b> = #28  |  |  |  |  |  |  |  |  |
| Length                             | Cable Length in inches, 12 inch minimum   |  |  |  |  |  |  |  |  |



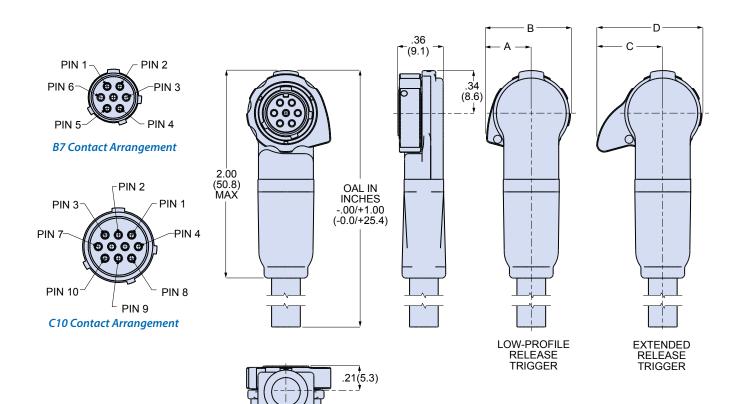


## SERIES 860 MouseBud<sup>™</sup> The snap-lock, trigger-release connector 860-001P Plug Cordsets



| Table 4: Cordset StylePropertyStyle 1Style 2Cable jacketThermoplastic polyurethane (TPU)Thermoplastic elastomer (TPV)OvermoldPolyamideThermoplastic elastomer (TPV)Operating temperature-30° C to +105° C-55° C to +125° CFlexibilityGoodExcellentWater ResistanceWaterproofWaterproofSolvent Resistance, Cable JacketExcellentGood |                                  |                               |  |  |
|---|----------------------------------|-------------------------------|--|--|
| Property  | Style 1                          | Style 2                       |  |  |
| Cable jacket  | Thermoplastic polyurethane (TPU) | Thermoplastic elastomer (TPV) |  |  |
| Overmold  | Polyamide                        | Thermoplastic elastomer (TPV) |  |  |
| Operating temperature   | -30° C to +105° C                | -55° C to +125° C             |  |  |
| Flexibility   | Good                             | Excellent                     |  |  |
| Water Resistance  | Waterproof                       | Waterproof                    |  |  |
| Solvent Resistance, Cable Jacket  | Excellent                        | Good                          |  |  |
| Solvent Resistance, Overmold  | Fair                             | Good                          |  |  |
| Weatherability  | Excellent                        | Excellent                     |  |  |
| Abrasion Resistance   | Excellent                        | Good                          |  |  |
| Flammability  | Flame retardant UL 94 V-0        | Flame retardant UL 94 HB      |  |  |

| Table 5: V        | Table 5: Wire Color |  |  |  |  |  |  |  |
|-------------------|---------------------|--|--|--|--|--|--|--|
| Contact<br>Number | Color               |  |  |  |  |  |  |  |
| 1                 | Black               |  |  |  |  |  |  |  |
| 2                 | Brown               |  |  |  |  |  |  |  |
| 3                 | Red                 |  |  |  |  |  |  |  |
| 4                 | Orange              |  |  |  |  |  |  |  |
| 5                 | Yellow              |  |  |  |  |  |  |  |
| 6                 | Green               |  |  |  |  |  |  |  |
| 7                 | Blue                |  |  |  |  |  |  |  |
| 8                 | Violet              |  |  |  |  |  |  |  |
| 9                 | Grey                |  |  |  |  |  |  |  |
| 10                | White               |  |  |  |  |  |  |  |



| Dimensions      |     |      |     |      |     |      |     |      |  |
|-----------------|-----|------|-----|------|-----|------|-----|------|--|
| Contact A B C D |     |      |     |      |     |      |     | כ    |  |
| Arr.            | In. | mm.  | ln. | mm.  | In. | mm.  | In. | mm.  |  |
| B7              | .36 | 9.1  | .67 | 17.0 | .53 | 13.5 | .84 | 21.3 |  |
| C10             | .43 | 10.9 | .80 | 20.3 | .59 | 15.0 | .97 | 24.6 |  |

## SERIES 860 MouseBud<sup>™</sup> The snap-lock, trigger-release connector 860-007P Plug Cordsets for USB+BAT





860-007P

#### **Specifications**

- Operating temperature: -30°C to +105°C (cordset style 1) -55°C to +125°C (cordset style 2)
- Dielectric withstanding voltage: 500 VAC
  Current rating: 5 A
- Contact resistance: 20 milliohms
- Water immersion: MIL-STD-810G Meth. 512.5
- Ingress protection: IP67
- Mechanical life: 2000 cycles

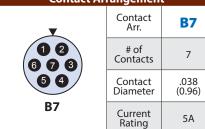
#### **Connector Construction**

- Shell: stainless steel
- Bayonet pins, retainer ring and torsion spring: stainless steel
- Coupling ring: aluminum
- Lid: aluminum
- Contacts: copper alloy, gold plated
- Insert: glass-filled thermoplastic
- Ground spring: gold-plated stainless steel
- Gasket: fluorosiliconePotting compound: RTV silicone

#### Cable Construction

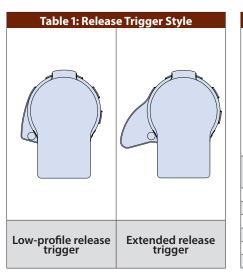
- Data pair: 90 ohm shielded twisted pair, #26 (19/38) AWG silver-coated copper, PFA insulation
- Power wires: (2) #22 (19/34) AWG silver-coated copper, TFE insulation
- Overmold: polyamide or thermoplastic elastomer
- shield: tin-coated copper microfilament, 90° minimum optical coverage
- Jacket: thermoplastic polyurethane (TPU) or thermoplastic elastomer (TPV)

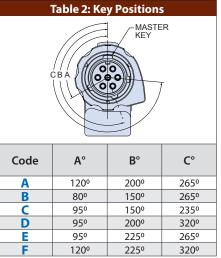
#### Contact Arrangement



Lightweight 860-007P MouseBud<sup>™</sup> harsh environment cordsets are shielded, overmolded and 100% tested. Wired per standard US Army Personal Area Network (PAN) protocol, these USB+BAT cordsets have dual power wires to handle standard USB power plus up to 5 amp battery power. Cable has an individually shielded 90 ohm data pair plus overall braided tinned copper shield with 90% minimum optical coverage. Shield is terminated to the connector with a stainless steel Band-Master<sup>®</sup> ATS strap. Water-resistant, meets MIL-STD-810G immersion requirement. Simply push to mate and lock. To release, actuate thumb trigger on coupling ring. Style 2 cordset with thermoplastic rubber jacket and overmold has excellent cold bend performance to -55° C. Connectors feature spring-loaded gold plated contacts, stainless steel shells and self-actuating bayonet coupling rings. 5A current rating, 500VAC dielectric withstanding voltage rating.

|                                 | How To Order   |    |  |  |  |   |  |  |  |  |
|---------------------------------|--|----|--|--|--|---|--|--|--|--|
|                                 | 860-007P- B7 ZR 1  |    |  |  |  |   |  |  |  |  |
| Product                         | 860-007P = MouseBud cordset for<br>USB+BAT   |    |  |  |  |   |  |  |  |  |
| Contact Arrangement             | <b>B7</b> = seven contacts, size B shell   |    |  |  |  |   |  |  |  |  |
| Finish                          | M = electroless NI<br>MT = Nickel-PTFE<br>ZR = Black zinc-nickel   |    |  |  |  |   |  |  |  |  |
| Release Trigger Style (Table 1) | 1 = Low-profile release trigger<br>2 = Extended release trigger  |    |  |  |  |   |  |  |  |  |
| Key Position (Table 2)          | A = position AD = position DB = position BE = position EC = position CF = position F   |    |  |  |  |   |  |  |  |  |
| Cordset Style (Table 3)         | <ul> <li>1 = polyurethane cable jacket with polyurethane overmold</li> <li>2 = polyurethane cable jacket with polyamide overmold</li> <li>2 = rubber cable jacket and rubber overmold</li> </ul> |    |  |  |  |   |  |  |  |  |
| Length                          | Overall Length in inches, 12 inch minimu   | ım |  |  |  | - |  |  |  |  |





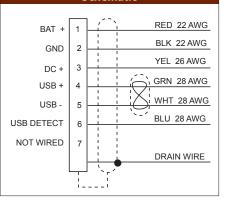
5 © 2014 Glenair, Inc • 1211 Air Way, Glendale, CA 91201 • 818-247-6000 • www.glenair.com • U.S. CAGE code 06324. Dimensions in inches (mm). Rev. 10.10.19

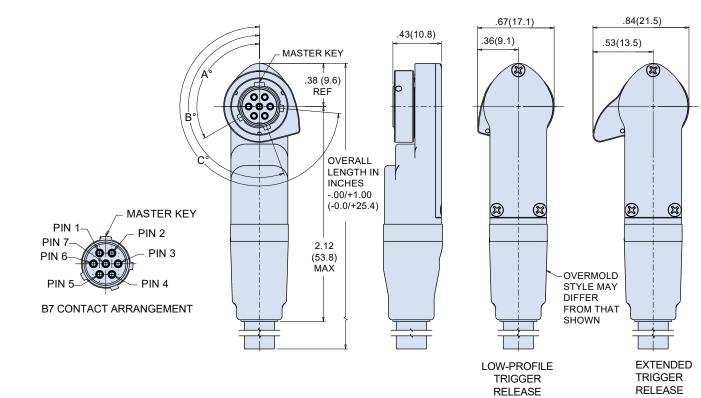
## SERIES 860 MouseBud<sup>™</sup> The snap-lock, trigger-release connector 860-007P Plug Cordsets for USB+BAT



|                                  | Table 4: Cordset Style           |                               |  |  |  |  |  |  |  |  |
|----------------------------------|----------------------------------|-------------------------------|--|--|--|--|--|--|--|--|
| Property                         | Style 1                          | Style 2                       |  |  |  |  |  |  |  |  |
| Cable jacket                     | Thermoplastic polyurethane (TPU) | Thermoplastic elastomer (TPV) |  |  |  |  |  |  |  |  |
| Overmold                         | Polyamide                        | Thermoplastic elastomer (TPV) |  |  |  |  |  |  |  |  |
| Operating temperature            | -30° C to +105° C                | -55° C to +125° C             |  |  |  |  |  |  |  |  |
| Flexibility                      | Good                             | Excellent                     |  |  |  |  |  |  |  |  |
| Water Resistance                 | Waterproof                       | Waterproof                    |  |  |  |  |  |  |  |  |
| Solvent Resistance, Cable Jacket | Excellent                        | Good                          |  |  |  |  |  |  |  |  |
| Solvent Resistance, Overmold     | Fair                             | Good                          |  |  |  |  |  |  |  |  |
| Weatherability                   | Excellent                        | Excellent                     |  |  |  |  |  |  |  |  |
| Abrasion Resistance              | Excellent                        | Good                          |  |  |  |  |  |  |  |  |
| Flammability                     | Flame retardant UL 94 V-0        | Flame retardant UL 94 HB      |  |  |  |  |  |  |  |  |

#### Schematic





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## SERIES 860 MouseBud<sup>™</sup> The snap-lock, trigger-release connector 860-004R Panel Mounting Receptacles With PC Tails





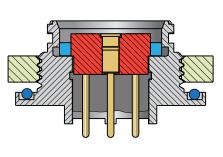
860-004R

#### **Specifications**

- Operating temperature: -55°C to +125°C
- Dielectric withstanding voltage: 500 VAC
- Current rating: 5 A
- Contact resistance: 20 milliohms
- Water immersion: MIL-STD-810G Method 512.5, mated or unmated
- Ingress protection: IP67
- Mechanical life: 2000 cycles

#### **Connector Construction**

- Shell: stainless steel
- Jam nut: stainless steel
- Contacts: copper alloy, gold plated
- Insert: glass-filled thermoplastic
- O-ring: fluorosilicone
- Peripheral seal: fluorosilicone
- Potting compound: RTV silicone

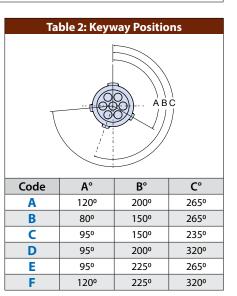


Mounting Style 07 for rear panel mounting

| 860-004R panel mount MouseBud receptacles with "hot shoe" type contacts are               |
|---|
| lightweight, ultra low profile and are rated for 2000 mating cycles. Suitable for hostile |
| environments including soldier-wearable electronics, these receptacle connectors          |
| meet MIL-STD-810G immersion requirements mated or unmated. Contacts are                   |
| easy to clean and damage resistant. Gold plated contacts, stainless steel shell and       |
| thermoplastic insulator. Fluorosilicone O-ring and seal. 5A current rating, 500VAC        |
| dielectric withstanding voltage rating55° to +125° C operating temperature.               |

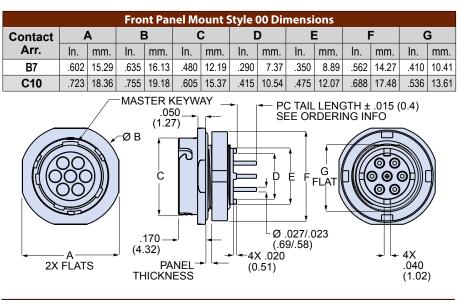
|                               | How To Order   |  |  |  |  |  |  |  |  |  |  |
|-------------------------------|--|--|--|--|--|--|--|--|--|--|--|
|                               | 860-004R- C10 ZR 07 A- 15-   |  |  |  |  |  |  |  |  |  |  |
| Product                       | 860-004R = MouseBud panel<br>mount receptacle with<br>PC tail terminals              |  |  |  |  |  |  |  |  |  |  |
| Contact Arrangement (Table 1) | <b>B7</b> = seven contacts, size B shell<br><b>C10</b> = ten contacts, size C shell  |  |  |  |  |  |  |  |  |  |  |
| Finish                        | M = electroless NI<br>MT = Nickel-PTFE<br>ZR = Black zinc-nickel                     |  |  |  |  |  |  |  |  |  |  |
| Shell Style                   | 00 = front panel mounting<br>07 = rear panel mounting                                |  |  |  |  |  |  |  |  |  |  |
| Keyway Position (Table 2)     | A = position AD = position DB = position BE = position EC = position CF = position F |  |  |  |  |  |  |  |  |  |  |
| Panel Thickness               | <b>15</b> = .062 (1.5) <b>30</b> = .125 (3.0)  |  |  |  |  |  |  |  |  |  |  |
| PC Tail Length                | <b>20</b> = .08 (2.0)<br><b>30</b> = .12 (3.0)                                       |  |  |  |  |  |  |  |  |  |  |

| Table 1: Contact Arrangements |                                       |                     |                |  |  |  |  |  |  |  |
|-------------------------------|---------------------------------------|---------------------|----------------|--|--|--|--|--|--|--|
| 2<br>3 (7<br>4<br>B           | <b>0</b><br><b>6</b><br><b>5</b><br>7 | 86                  |                |  |  |  |  |  |  |  |
| Contact<br>Arr.               | <b>B7</b>                             | Contact<br>Arr.     | C10            |  |  |  |  |  |  |  |
| # of<br>Contacts              | 7                                     | # of<br>Contacts    | 10             |  |  |  |  |  |  |  |
| Contact<br>Diameter           | .038<br>(0.96)                        | Contact<br>Diameter | .038<br>(0.96) |  |  |  |  |  |  |  |
| Current<br>Rating             | 5A                                    | Current<br>Rating   | 5A             |  |  |  |  |  |  |  |

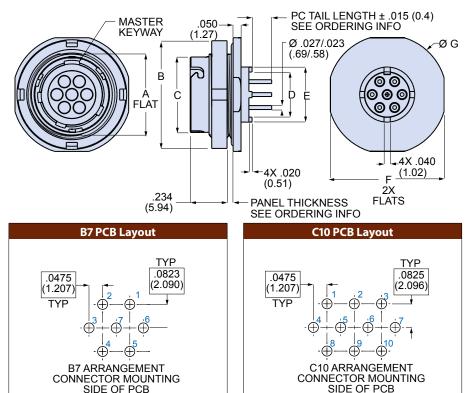


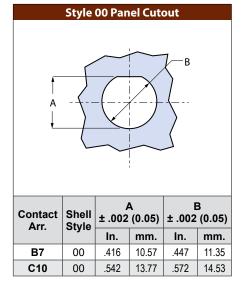


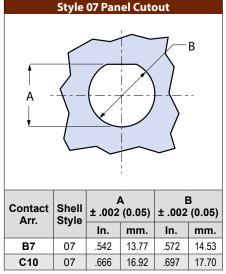
860-004R Panel Mounting Receptacles With PC Tails



|         | Rear Panel Mount Style 07 Dimensions |       |      |       |      |       |      |       |      |       |      |       |      |       |
|---------|--------------------------------------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|
| Contact | A B                                  |       |      |       | C    |       | D    |       | E    |       | F    |       | G    |       |
| Arr.    | ln.                                  | mm.   | ln.  | mm.   | ln.  | mm.   | ln.  | mm.   | ln.  | mm.   | ln.  | mm.   | ln.  | mm.   |
| B7      | .536                                 | 13.60 | .688 | 17.48 | .480 | 12.19 | .290 | 7.37  | .350 | 8.89  | .723 | 18.36 | .755 | 19.18 |
| C10     | .656                                 | 16.66 | .812 | 20.62 | .605 | 15.37 | .415 | 10.54 | .475 | 12.07 | .855 | 21.72 | .890 | 22.61 |







| Jam Nut Tightening Tools |   |   |  |  |  |  |  |  |
|--------------------------|---|---|--|--|--|--|--|--|
| C                        | install s<br>nuts. 1<br>drive. 2<br>recom | ese tools to<br>spanner-type jam<br>44 inch square<br>10-25 inIbs.<br>nended torque.<br>1ed steel, nickel |  |  |  |  |  |  |
| Layout                   | Mounting Style                            | Tool PN   |  |  |  |  |  |  |
| B7                       | Style 00 Front Mt                         | 600-146-05  |  |  |  |  |  |  |
| B7                       | Style 07 Rear Mt                          | 600-147-6   |  |  |  |  |  |  |
| C10                      | Style 00 Front Mt                         | 600-147-6   |  |  |  |  |  |  |
| C10                      | Style 07 Rear Mt                          | 600-146-12  |  |  |  |  |  |  |



## 860-005R Panel Mounting Receptacles With Solder Cup Terminals



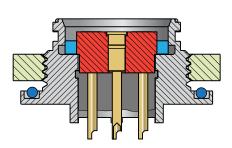
860-005R

#### **Specifications**

- Operating temperature: -55°C to +125°C
- Dielectric withstanding voltage: 500 VAC
- Current rating: 5 A
- Contact resistance: 20 milliohms
- Wire size: #22 AWG maximum
- Water immersion: MIL-STD-810G Method 512.5
- Ingress protection: IP67
- Mechanical life: 2000 cycles

#### **Connector Construction**

- Shell: stainless steel
- Jam nut: stainless steel
- Contacts: copper alloy, gold plated
- Insert: glass-filled thermoplastic
- O-ring: fluorosilicone
- Peripheral seal: fluorosiliconePotting compound: RTV silicone

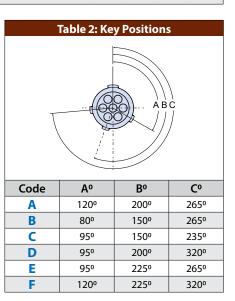


Mounting Style 07 for rear panel mounting

860-005R panel mount MouseBud receptacles with "hot shoe" type contacts are lightweight, ultra low profile and are rated for 2000 mating cycles. Suitable for hostile environments including soldier-wearable electronics, these receptacle connectors meet MIL-STD-810G immersion requirements mated or unmated. Contacts are easy to clean, damage resistant and non-removable. Solder cups accept up to #22 AWG wire. Gold plated contacts, stainless steel shell and thermoplastic insulator. 5A current rating, 500VAC dielectric withstanding voltage rating. -55° to +125° C operating temperature.

| How To Order                  |   |    |    |    |            |    |  |  |
|-------------------------------|---|----|----|----|------------|----|--|--|
|                               | 860-005R-   | B7 | ZR | 07 | <b>A</b> - | 12 |  |  |
| Product                       | 860-005R = MouseBud panel<br>mount receptacle with<br>solder cup terminals                          |    |    |    |            |    |  |  |
| Contact Arrangement (Table 1) | B7 = seven contacts, size B shell<br>C10 = ten contacts, size C shell                               |    |    |    |            |    |  |  |
| Finish                        | M = electroless NI<br>MT = Nickel-PTFE<br>ZR = Black zinc-nickel                                    |    |    |    |            |    |  |  |
| Shell Style                   | 00 = front panel mounting<br>07 = rear panel mounting   |    |    |    |            |    |  |  |
| Key Position (Table 2)        | A = position A $D = position D$ $B = position B$ $E = position E$ $C = position C$ $F = position F$ |    |    |    | -          |    |  |  |
| Panel Thickness               | <b>15</b> = .062 (1.5) <b>30</b> = .125 (3.0)   |    |    |    |            |    |  |  |

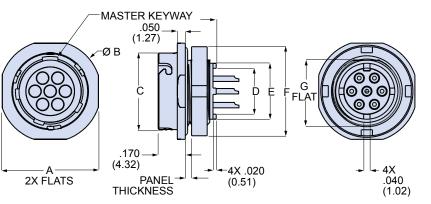
| Table 1: Contact Arrangements |                                       |                                     |                |  |  |  |  |
|-------------------------------|---------------------------------------|-------------------------------------|----------------|--|--|--|--|
| 2<br>3 7<br>4<br>B            | <b>0</b><br><b>6</b><br><b>5</b><br>7 | <b>0 2 3</b><br><b>3 9 0</b><br>C10 |                |  |  |  |  |
| Contact<br>Arr.               | <b>B7</b>                             | Contact<br>Arr.                     | C10            |  |  |  |  |
| # of<br>Contacts              | 7                                     | # of<br>Contacts                    | 10             |  |  |  |  |
| Contact<br>Diameter           | .038<br>(0.96)                        | Contact<br>Diameter                 | .038<br>(0.96) |  |  |  |  |
| Current<br>Rating             | 5A                                    | Current<br>Rating                   | 5A             |  |  |  |  |



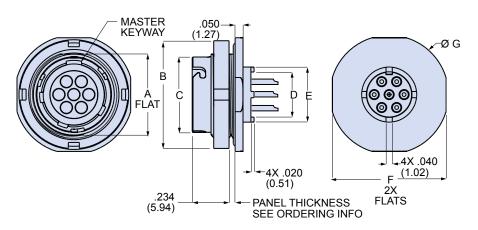


860-005R Panel Mounting Receptacles With Solder Cup Terminals

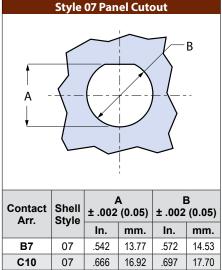
| Front Panel Mount Style 00 Dimensions |                 |       |      |       |      |       |      |       |      |       |      |       |      |       |
|---------------------------------------|-----------------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|
| Contact                               | Contact A B C D |       | )    | E     |      | F     |      | G     |      |       |      |       |      |       |
| Arr.                                  | ln.             | mm.   | ln.  | mm.   | ln.  | mm.   | ln.  | mm.   | ln.  | mm.   | ln.  | mm.   | ln.  | mm.   |
| B7                                    | .602            | 15.29 | .635 | 16.13 | .480 | 12.19 | .290 | 7.37  | .350 | 8.89  | .562 | 14.27 | .410 | 10.41 |
| C10                                   | .723            | 18.36 | .755 | 19.18 | .605 | 15.37 | .415 | 10.54 | .475 | 12.07 | .688 | 17.48 | .536 | 13.61 |



|         | Rear Panel Mount Style 07 Dimensions |       |      |       |      |       |      |       |      |       |      |       |      |       |
|---------|--------------------------------------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|
| Contact | Contact A                            |       | E    | B C   |      | D E   |      | E F   |      | =     | G    |       |      |       |
| Arr.    | ln.                                  | mm.   | ln.  | mm.   | ln.  | mm.   | ln.  | mm.   | ln.  | mm.   | ln.  | mm.   | ln.  | mm.   |
| B7      | .536                                 | 13.60 | .688 | 17.48 | .480 | 12.19 | .290 | 7.37  | .350 | 8.89  | .723 | 18.36 | .755 | 19.18 |
| C10     | .656                                 | 16.66 | .812 | 20.62 | .605 | 15.37 | .415 | 10.54 | .475 | 12.07 | .855 | 21.72 | .890 | 22.61 |



#### Style 00 Panel Cutout В в Α Contact Shell ±.002 (0.05) ±.002 (0.05) Arr. Style In. mm. In. mm. **B**7 00 .416 10.57 .447 11.35 C10 00 .542 13.77 .572 14.53



#### Jam Nut Tightening Tools



Use these tools to install spanner-type jam nuts. 1/4 inch square drive. 20-25 in.-lbs. recommended torque. Hardened steel, nickel plated.

| Layout | Mounting Style    | Tool PN    |
|--------|-------------------|------------|
| B7     | Style 00 Front Mt | 600-146-05 |
| B7     | Style 07 Rear Mt  | 600-147-6  |
| C10    | Style 00 Front Mt | 600-147-6  |
| C10    | Style 07 Rear Mt  | 600-146-12 |



## 860-006P Plug Cordsets

860-006P MouseBud<sup>™</sup> harsh environment cordsets are overmolded, shielded and 100% tested. High-performance cable is equipped with a braided tinned copper shield with 90% minimum optical coverage. Shield is terminated to connector with a stainless steel Band-Master<sup>®</sup> ATS strap. Ultra-lightweight, low profile and water-resistant. Auto-coupling mechanism—simply push to mate and lock. To release, actuate thumb trigger on coupling ring. Style 2 cordset with thermoplastic rubber jacket and overmold has excellent cold bend performance to -55° C. Connectors feature spring-loaded gold plated contacts, stainless steel shells and self-actuating bayonet coupling rings. 5A current rating, 500VAC dielectric withstanding voltage rating.

|   | How To Order  |
|---|---|
|   | 860-006P-   B7   ZR   1   A   2   4  -3   |
| Product                                   | 860-006P = overmolded MouseBud<br>cordset   |
| Contact Arrangement<br>(Table 1)          | B7 = seven contacts, size B shell<br>C10 = ten contacts, size C shell   |
| Finish                                    | ME = electroless NI     TZ = tin zinc       MT = nickel-PTFE     ZR = black zinc-nickel   |
| <b>Release Trigger Style</b><br>(Table 2) | 1 = Standard low-profile release trigger (fig. 1)<br>2 = Extended release trigger (fig. 2)  |
| Key Position (Table 3)                    |   |
| Cordset Style (Table 4)                   | <ul> <li>1 = polyurethane cable jacket with polyurethane overmold</li> <li>2 = polyurethane cable jacket with polyamide overmold</li> <li>3 = rubber cable jacket with rubber overmold</li> </ul> |
| Wire Size (AWG)                           | <b>4</b> = #24<br><b>8</b> = #28  |
| Length                                    | Cable Length in inches, 12 inch minimum   |



- Operating temperature: -30°C to +105°C (cordset style 1) -55°C to +125°C (cordset style 2)
- Dielectric withstanding voltage: 500 VAC
- Current rating: 5 A
- Contact resistance: 20 milliohms
- Water immersion: MIL-STD-810G Meth. 512.5
- Ingress protection: IP67
- Mechanical life: 2500 cycles

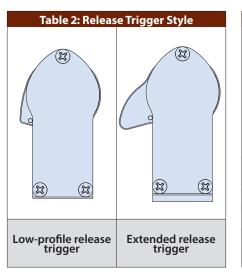
#### **Connector Construction**

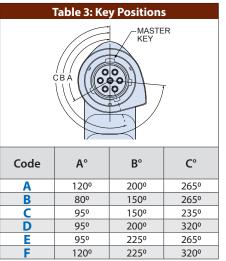
- Shell, lid: aluminum alloy
- Bayonet pins, coupling ring, retainer ring and torsion spring: stainless steel
- Contacts: copper alloy, gold plated
- Insert: ultem or LCP/PPS, black
- Ground spring: stainless steel/gold-plated
- Gasket: fluorosilicone
- Potting compound: EP-38

#### **Cable Construction**

- Wires: silver-coated copper, TFE insulation
- Overmold: polyamide or thermoplastic elastomer
- shield: tin-coated copper microfilament, 90° minimum optical coverage
- Jacket: thermoplastic polyurethane (TPU) or thermoplastic elastomer (TPV)

| Table 1: Contact Arrangements |                                       |                                  |                |  |  |  |  |  |
|-------------------------------|---------------------------------------|----------------------------------|----------------|--|--|--|--|--|
| B                             | <b>2</b><br><b>3</b><br><b>4</b><br>7 | 6 0 0<br>6 6 6 0<br>0 9 8<br>C10 |                |  |  |  |  |  |
| Contact<br>Arr.               | <b>B7</b>                             | Contact<br>Arr.                  | <b>C10</b>     |  |  |  |  |  |
| # of<br>Contacts              | 7                                     | # of<br>Contacts                 | 10             |  |  |  |  |  |
| Contact<br>Diameter           | .038<br>(0.96)                        | Contact<br>Diameter              | .038<br>(0.96) |  |  |  |  |  |
| Current<br>Rating             | 5A                                    | Current<br>Rating                | 5A             |  |  |  |  |  |





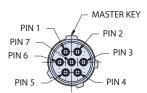
3 © 2014 Glenair, Inc • 1211 Air Way, Glendale, CA 91201 • 818-247-6000 • www.glenair.com • U.S. CAGE code 06324. Dimensions in inches (mm). Rev. 07.26.18

## SERIES 860 MouseBud<sup>™</sup> The snap-lock, trigger-release connector 860-006P Plug Cordsets

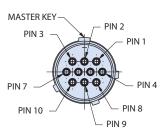


|                                  | Table 4: Cordset Style           |                               |  |  |  |  |  |  |  |
|----------------------------------|----------------------------------|-------------------------------|--|--|--|--|--|--|--|
| Property                         | Style 1                          | Style 2                       |  |  |  |  |  |  |  |
| Cable jacket                     | Thermoplastic polyurethane (TPU) | Thermoplastic elastomer (TPV) |  |  |  |  |  |  |  |
| Overmold                         | Polyamide                        | Thermoplastic elastomer (TPV) |  |  |  |  |  |  |  |
| Operating temperature            | -30° C to +105° C                | -55° C to +125° C             |  |  |  |  |  |  |  |
| Flexibility                      | Good                             | Excellent                     |  |  |  |  |  |  |  |
| Water Resistance                 | Waterproof                       | Waterproof                    |  |  |  |  |  |  |  |
| Solvent Resistance, Cable Jacket | Excellent                        | Good                          |  |  |  |  |  |  |  |
| Solvent Resistance, Overmold     | Fair                             | Good                          |  |  |  |  |  |  |  |
| Weatherability                   | Excellent                        | Excellent                     |  |  |  |  |  |  |  |
| Abrasion Resistance              | Excellent                        | Good                          |  |  |  |  |  |  |  |
| Flammability                     | Flame retardant UL 94 V-0        | Flame retardant UL 94 HB      |  |  |  |  |  |  |  |

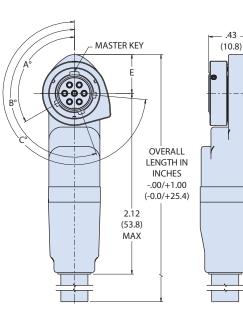
| Table 5: Wire Color |        |  |  |  |  |  |  |
|---------------------|--------|--|--|--|--|--|--|
| Contact<br>Number   | Color  |  |  |  |  |  |  |
| 1                   | Black  |  |  |  |  |  |  |
| 2                   | Brown  |  |  |  |  |  |  |
| 3                   | Red    |  |  |  |  |  |  |
| 4                   | Orange |  |  |  |  |  |  |
| 5                   | Yellow |  |  |  |  |  |  |
| 6                   | Green  |  |  |  |  |  |  |
| 7                   | Blue   |  |  |  |  |  |  |
| 8                   | Violet |  |  |  |  |  |  |
| 9                   | Grey   |  |  |  |  |  |  |
| 10                  | White  |  |  |  |  |  |  |

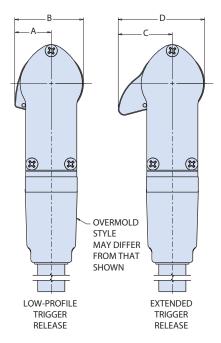


**B7 Contact Arrangement** 



C10 Contact Arrangement





| Dimensions |           |      |     |      |     |      |     |      |     |      |  |
|------------|-----------|------|-----|------|-----|------|-----|------|-----|------|--|
| Contact    | Contact A |      |     | В    |     | С    |     | D    |     | E    |  |
| Arr.       | ln.       | mm.  | ln. | mm.  | ln. | mm.  | In. | mm.  | In. | mm.  |  |
| B7         | .36       | 9.1  | .67 | 17.1 | .53 | 13.5 | .84 | 21.5 | .38 | 9.6  |  |
| C10        | .43       | 10.8 | .80 | 20.4 | .59 | 15.0 | .97 | 24.5 | .44 | 11.2 |  |



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