

# **Hardware**

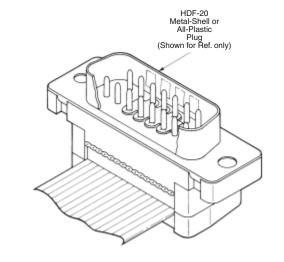
Commoning Strip (for HDF-20 Plugs, Size 20 Pin Contacts)

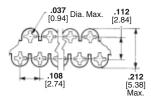
## **Material and Finish:**

Brass, .004 [0.10] thick, tin plated **Part No. 206918-2** (Continuous Strip)

# Related Product Data:

Used with HDF-20 Plugs—page 126





#### Notes:

- Use punching tool to remove undesired pin commoning locations on commoning strip.
   Use mating receptacle to seat strip over pins in plug. Punching tool is not supplied by TE.
- 2. Sold in strip form, strip contains 10,000 commoning locations.

Male Screw Retainers for Metal-Shell Connectors (HDE and HDP)

## **Material and Finish:**

**Male Screw**—Steel, zinc plated clear or yellow chromate

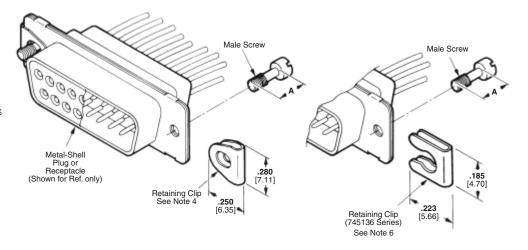
Retaining Clip—.012 [0.31] stainless

## Related Product Data:

Connectors used with: HDE Metal-Shell—pages 114 & 115 HDP Metal-Shell—pages 90-102

### **Technical Documents:**

Instruction Sheet—408-7837



Male Screw	Thread Size	Dimension	Male Screw R	etainer Kit No.
Finish	Tilleau Size	Α	Individual	Bulk Packed*
		.220	5205980-1	5205980-3
	4-40	5.59	5787354-1**	_
Yellow Chromate	4-40	<b>.200</b> 5.08	5745136-1	5745136-2
	M3 (Metric)	<b>.225</b> 5.72	5207871-1	_
Clear	4-40	<b>.220</b> 5.59	5205980-4	5205980-5
Chromate	4-40	<b>.200</b> 5.08	5745136-3	5745136-4

<sup>\*</sup>Each part is individually bulk packed for multiple kit orders.

- Notes: 1. All parts are packaged unassembled.
  - Each kit is comprised of two male screws and two retaining clips. Male screw retainers are also furnished as part of cable clamp kits (pages 137 and 138).
  - Male screw retainers mate with female screwlocks (page 144), with HDF metal-shell connectors featuring 4-40 threaded inserts (page 148) and with HD metal-shell board mount connectors featuring 4-40 threaded inserts or female screwlocks.
  - Retaining clip must be assembled onto connector flanges with threaded hole toward wire side of connector.
  - 5. All screws have straight slotted heads except where noted.
  - Retaining clip must be assembled onto connector flanges with notched side of retainer toward mating side of connector.

**Note:** All part numbers are RoHS compliant.

<sup>\*\*</sup> Phillips Head Screw



## **Material and Finish:**

**Male Screw**—Steel, zinc plated yellow chromate

Retaining Clip—.012 [0.51] stainless steel

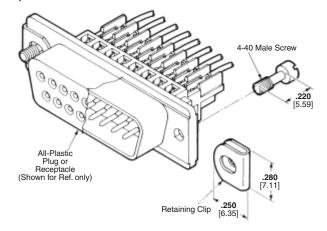
#### **Related Product Data:**

Connectors used with: HDE All-Plastic—pages 112 & 113

**Technical Documents:** 

Instruction Sheet-408-7837

# Male Screw Retainers for All-Plastic Connectors (HDE)



#### Kit Numbers:

745647-1 (Individually packaged, see Note 2)

745647-2 (Bulk packed)\*

\*Each part is individually bulk packed for multiple kit orders.

Notes: 1. All parts are packaged unassembled.

- 2. Each kit is comprised of two 4-40 male screws and two retaining clips.
- Male screw retainers mate with female screwlocks (page 148), with HDF All-Plastic connectors featuring 4-40 threaded inserts (page 125), with HD All-Plastic board mount connectors featuring integral standoffs with 4-40 threaded inserts and female screwlocks.
- 4. Retaining clips must be assembled onto connector flanges with threaded hole toward wire side of connector.

## Material and Finish:

Male Screw—Steel, zinc plated clear chromate

Retaining Clip—.012 [0.51] stainless

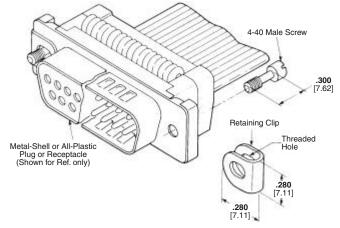
#### **Related Product Data:**

Connectors used with: HDF Metal-Shell and All-Plastic pages 125 & 126

#### **Technical Documents:**

Instruction Sheet—408-7837

# Male Screw Retainers for Metal-Shell and All-Plastic Connectors (HDF)



#### Kit Numbers:

746881-1 (Individually packaged, see Note 2)

746881-2 (Bulk packed)\*

\*Each part is individually bulk packed for multiple kit orders.

Notes: 1. All parts are packaged unassembled.

- 2. Each kit is comprised of two male screws and two retaining clips.
- Male screw retainers mate with female screwlocks (page 148), and with HD board mount connectors featuring female screwlocks.
- Retaining clips must be assembled onto connector flanges with threaded hole toward wire side of connector.

Note: All part numbers are RoHS compliant.



#### **Material and Finish:**

**All Parts**—Cold rolled steel, zinc plated clear or yellow chromate

#### **Related Product Data:**

Connectors used with: HDE Metal-Shell or All-Plastic pages 112-115 HDF Metal-Shell or All-Plastic—

pages 125 & 126 **HDP Metal-Shell**—pages 90-102

**HD Board Mount**—pages 54-71, 78-85, 87-89

## **Technical Documents:**

Instruction Sheet—408-7837



**Nut Driver, Part No. 811262-1** (Used for assembling female screwlocks to connector flange)

**Female Screwlocks** for Metal-Shell and **All-Plastic Connectors** Style (B). Standard and Long Female Screwlocks Kit (HDE, HDF, HDP) Flat Washers Style (A). Female **.250** [6.35] Screwlocks Kit Flat Washers (See Note 3.) Metal-Shell or All-Plastic Lock Washer Plug or Receptacle (Shown for Ref. only. See Notes 4 & 5.) †Part Number 5748270-2 Dimension .158 [4.01]

Connector	Style	Dimension	Thread	Finish	Kit Number	
Used with	Style	С	Size	FIIIISII	Individual	Bulk Packed
HD All-Plastic Right-Angle	(A)	.250	4-40	Yellow Chromate	5207952-1	_
Plugs and Receptacles	(A)	6.35	4-40	Clear Chromate	5207952-3	_
HDE Metal-Shell or All-Plastic	(P)	.250	4-40	Yellow Chromate	5745563-1	5745563-1
Plugs and Receptacles	(B)	6.35	4-40	Clear Chromate	5745563-3	5745563-4
	(B)	<b>.312</b> 7.93	4-40 M3 (Metric)	Yellow Chromate	5205817-1	5205817-2
HDP or HDF Metal-Shell or All-Plastic Plugs and				Clear Chromate	5205817-3	5205817-4
Receptacles				Yellow Chromate	5207872-1	_
•				Clear Chromate	5207872-3	_
HD or HDF All-Plastic Plugs			4-40	Yellow Chromate	5207719-1	5207719-2
and Receptacles with	(B)	<b>.560</b> 14.22	4-40	Clear Chromate	5207719-3	5207719-4
Integral Standoffs	. ,		2-56*	Clear Chromate	5747223-3	_

<sup>\* 2-56</sup> is the male thread size. The female thread size is 4-40.

- Each female screwlock kit is comprised of two assemblies as illustrated above.
- One or two flat washers may be required for panel thicknesses less than .060 [1.52]. Female screwlocks are not recommended for panel thicknesses greater than .060 [1.52].
- 4. Female screwlocks with 2-56 thread size are to be used with cable clamps with mounting flanges. Female screwlocks with 4-40 and M3 (Metric) thread sizes can be used with all other cable clamps.
- Female screwlocks mate with male screw retainers (pages 146 and 147).
- 6. Short female screwlocks cannot be used with HDF connectors (pages 125 & 126)

### Individual Screwlocks

(Washers and Nuts not included)

Connector	Chulo	Dimension	Thread	Finish	Screwlocks	
Used with	Style	C	Size	FINISN	Individual	Bulk Packed <sup>△</sup>
HD All-Plastic Right-Angle	(4)	<b>.250</b> 6.35	4-40	Yellow Chromate	5207953-2	_
Plugs and Receptacles	(A)		4-40	Clear Chromate	5207953-3	_
	(B)	<b>.312</b> 7.93	4-40	Clear Chromate	_	5205818-3**
					5748558-3	5748558-4
				Yellow Chromate	5748270-2	5205818-2**
HDP or HDF Metal-Shell or All-Plastic Plugs and			M2.6** (Metric)	Clear Chromate	5749765-3	_
Receptacles			M3*** (Metric)	Clear Chromate	5747404-3	_
	(Special)	<b>.185</b> 4.70	4-40	Clear Chromate	5747877-3	_

<sup>△</sup> Each part is individually bulk packed for multiple kit orders.

Note: All part numbers are RoHS compliant.

<sup>△</sup> Each part is individually bulk packed for multiple kit orders.

Notes: 1. All parts are packaged unassembled.

<sup>†</sup>Part No. 5748270-2 Dimension .158 [4.01]

<sup>\*\*</sup>M2.6 is the female thread size. The male thread size is 4-40.

<sup>\*\*\*</sup>M3 is the female thread size. The male thread size is 4-40.



## **Slide Latches**

## **Material and Finish:**

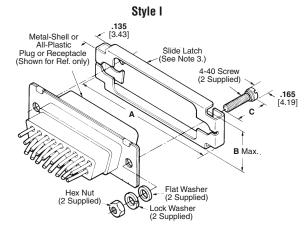
**4-40 Screws, Washers and Hex Nuts**—Steel, zinc plated yellow chromate

2-56 Screws, Washers and Hex Nuts—Steel, zinc plated clear chromate Slide Latch—Stainless steel

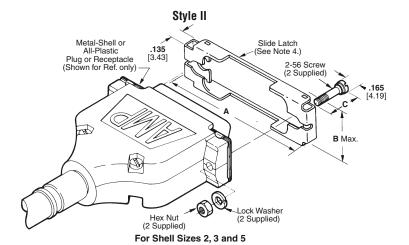
# **Related Product Data:**

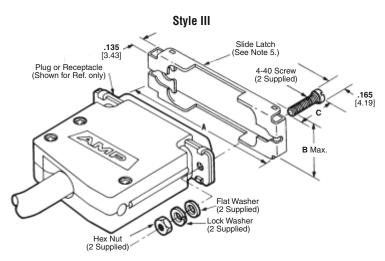
Connectors used with: HDE Metal-Shell or All-Plastic pages 112-115 HDF Metal-Shell or All-Plastic pages 125 & 126 HDP Metal-Shell—pages 90-102 HD Board Mount—pages 54-71, 78-85, 87-89

**Technical Documents: Instruction Sheet**—408-6551



For Shell Sizes 1 and 4

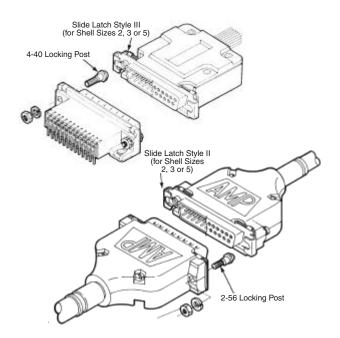




For Shell Sizes 2, 3 and 5



# **Slide Latches**



Typical Applications of Locking Posts and Slide Latches

Shell	Shell Style		Dimensions	;	Slide Latch	Kit Numbers	Side Latch
Size	Size Style	Α	В	С	Individual	Bulk Packed*	Only
1	1	<b>1.397</b> 35.48	<b>.490</b> 12.45	<b>.415</b> 10.54	5745404-1	_	164890-1
	II	<b>1.725</b> 43.82	<b>.470</b> 11.94	<b>.547</b> 13.89	5745583-1	_	749027-1
		<b>1.725</b> 43.82	<b>.470</b> 11.94	<b>.415</b> 10.54	5745583-5	_	749027-1
0	2 III	<b>1.725</b> 43.82	<b>.470</b> 11.94	<b>.450</b> 11.43	5745583-7	_	_
2		<b>1.725</b> 43.82	<b>.470</b> 11.94	<b>.415</b> 10.54	_	5748653-1	_
		<b>1.725</b> 43.82	<b>.490</b> 12.45	<b>.290</b> 7.37	5749028-1 <sup>7</sup>	_	_
		<b>1.725</b> 43.82	<b>.437</b> 11.10	<b>.415</b> 10.54	_	5786138-1 <sup>7</sup>	_
3	II	<b>2.265</b> 57.53	<b>.470</b> 11.94	<b>.547</b> 13.89	5745584-1	_	749996-1
3	III	<b>2.265</b> 57.53	<b>.470</b> 11.94	<b>.415</b> 10.54	5745584-3	_	749996-1
4	1	<b>2.913</b> 73.99	<b>.490</b> 12.45	<b>.415</b> 10.54	5745407-1	_	164890-4
5	III	<b>2.819</b> 71.60	<b>.575</b> 14.61	<b>.415</b> 10.54	5745578-3	_	749997-1

<sup>\*</sup>Each part is individually bulk packed for multiple kit orders.

Notes: 1. All parts are packaged unassembled.

- 2. Each kit is comprised of a slide latch and two screws, flat washers (if required), lock washers and hex nuts. Style I slide latches are also furnished as part of cable clamp kits (page 142).
- 3. Style I slide latches can be used with cable clamps that do not extend beyond the front flange of the connector or on connectors without cable clamps.
- 4. Style II slide latches can be used with any cable clamp that has the mounting ear configuration as
- 5. Style III slide latches can be used on connectors without cable clamps or with cable clamps that do not have the mounting ear configuration shown with Style II above.
- 6. Slide latches mate with locking posts (page 151).
- 7. No nuts, washers, or lockwashers.

Note: All part numbers are RoHS compliant.

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# Slide Latch Clip **Assembly for Unfiltered Mating Half**

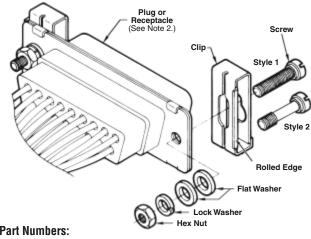
## **Material and Finish:**

Screw, Washers and Hex Nut—Cold rolled steel, zinc plated clear chromate

Clip—Stainless steel

#### **Technical Documents:**

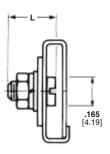
Instruction Sheet—408-7785



#### **Kit Part Numbers:**

Thread Size	Screw Length L	Pkg.	Screw Style	Part No.
4-40	.415	Unit⁺	- 1	5206942-1
4-40	10.54	Bulk	1	5206942-2
2-56	.547	Unit	2	5748078-1**
2-30	13.89		2	

- † Two assemblies per package.
- \* Each part is individually bulk packed for multiple kit orders.
- \*\* Designed for cable clamps with mounting ears. No flat washers included.



#### Notes:

- 1. All parts are packaged unassembled.
- Slide Latch Clip Assemblies can be used on any Subminiature D AMPLIMITE HD-20 metal-shell plug or receptacle.
- Slide Latch Clip Assemblies mate with Locking Post Assemblies shown below.

# **Locking Post Assembly**

## **Material and Finish:**

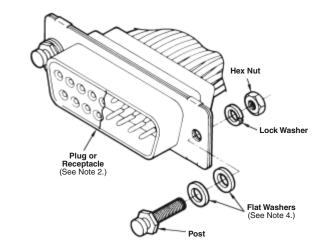
All Parts—Cold rolled steel, zinc plated clear or yellow chromate

## **Related Product Data:**

408-6551

408-7785

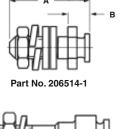
Connectors used with: HDE Metal-Shell or All-Plasticpages 112-115 HDF Metal-Shell or All-Plasticpages 125 & 126 HDP Metal-Shell—pages 90-102 HD Board Mount—pages 54-71, 78-85, 87-89 Instruction Sheets-

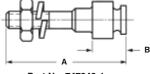


Thread	Locking Post		nsions	Locking Post Kit Number (See Note 4)	
Size	Finish	А В		Individual	Bulk Packed*
	Yellow .410 .110 520651		5206514-1	5206514-3	
4-40	Clear Chromate	<b>.410</b> 10.41	<b>.110</b> 2.79	5206514-4	_
	Yellow Chromate	<b>.560</b> 14.22	<b>.110</b> 2.79	5206514-6	5206514-7
2-56	Yellow Chromate	<b>.615</b> 15.62	<b>.172</b> 4.37	5747242-1	_

<sup>\*</sup>Each part is individually bulk packed for multiple kit orders.







Part No. 747242-1

#### Notes:

- 1. All parts are packaged unassem-
- 2. Each kit is comprised of two complete assemblies, as illustrated
- 3. For front panel mounting, it is recommended that a shim be used between the connector flange and panel to prevent bowing of the flange.
- 4. Locking posts with 2-56 thread size are to be used with cable clamps with mounting flanges. Locking posts with 4-40 thread size can be used with all other cable clamps
- 5. Locking posts mate with slide latches (page 149).



## Material

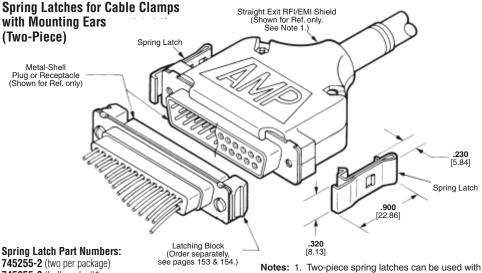
.015 [0.38] Stainless steel

#### **Related Product Data:**

Connectors used with: HDE Metal-Shell—pages 114 & 115 HDP Metal-Shell (Tin plated only) pages 90-102

#### **Technical Documents:**

Instruction Sheet—408-9130



745255-3 (bulk packed)\* \*Two-piece spring latches are individ-

ually bulk packed for multiple part

RFI/EMI shields (pages 141).

2. Two-piece spring latches mate with latching blocks (pages 153 & 154).

#### Typical Application of Two-Piece Spring Latches with Straight Exit RFI/EMI Shield

# **Spring Latches** (Two-Piece)

## Material:

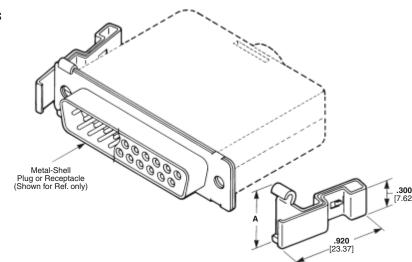
Stainless steel

#### **Related Product Data:**

Connectors used with: HDE Metal-Shell—pages 114 & 115 HDP Metal-Shell—pages 90-102

# **Technical Documents:**

Instruction Sheet—408-9131



## **Spring Latch Part Numbers**

Size	Dimension A	Two Per Package	Bulk Packed*
1-4	<b>.540</b> 13.72	745779-2	745779-3
5	<b>.650</b> 16.51	745779-5	_

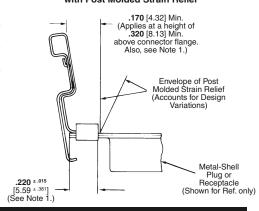
<sup>\*</sup>Two-piece spring latches are individually bulk packed for multiple part orders.

Notes: 1. These dimensions must be maintained to assure satisfactory operation of the spring latches.

2. Two-piece spring latches mate with latching blocks (pages 153 & 154).

Note: All part numbers are RoHS compliant.

#### Typical Application of Two-Piece Spring Latches with Post Molded Strain Relief



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Dimensions are shown for reference purposes only. Specifications subject to change.

Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752

Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999

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## **Material and Finish:**

Latching Blocks—Zinc
Pan Head Screws—Steel, zinc plated

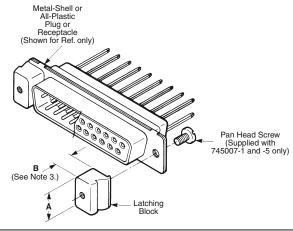
#### **Related Product Data:**

Connectors used with:
HDE Metal-Shell or All-Plastic—
pages 112-115
HDF Metal-Shell or All-Plastic—
pages 125 & 126
HDP Metal-Shell—pages 90-102
HD Board Mount—pages 54-71,
78-85, 87-89
Mating/Panel Mounting—page 136

## **Technical Documents:**

Instruction Sheet—408-9128

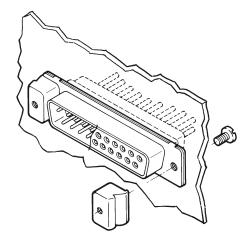
# Latching Blocks with Threaded Hole

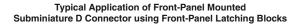


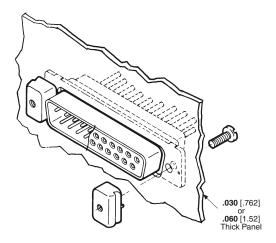
Shell (No. of		nsions	Panel Thread		Rear-Panel Latching Block Part No.		Front-Panel Latching Block Part No.							
Contact Pos.)	Α	В	Thickness	ess Size	Individual	Bulk Packed*	Individual	Bulk Packed*						
	<b>.400</b> 10.16	.190	.060	M3 (Metric)	_	745403-2	_	_						
	10.16	4.83	1.52	4-40	745403-8	_	_							
1 thru 4 (9 thru 37)	<b>.400</b> 10.16	<b>.220</b> 5.59	<b>.030</b> 0.76	4-40	747717-2	_	_	_						
,				М3			5745007-1							
	<b>.400</b> 10.16	<b>.250</b> 6.35	_	(Metric)	(Metric)	(Metric)	(Metric)	(Metric)	(Metric)	(Metric)	_	_	208101-1	208101-2
	10.10	0.00	-	4-40	_	_	208101-8	208101-9						
5 (50)	<b>.530</b> 13.46	<b>.250</b> 6.35	_	4-40	_	_	1-208101-1	_						

<sup>\*</sup>Bulk packed for multiple part orders.

- Notes: 1. All parts are packaged unassembled.
  - Each front panel latching block kit is comprised of two latching blocks. Two pan head screws of the appropriate length and thread size to be supplied by customer.
  - B dimension .250 [6.35] is for connector flange mounting, .220 [5.59] is for use with .030 [0.76] thick panels, and .190 [4.83] is for use with .060 [1.52] thick panels.
  - 4. Latching blocks mate with spring latches (page 152).







Typical Application of Rear-Panel Mounted Subminiature D Connector using Rear-Panel Latching Blocks

Note: All part numbers are RoHS compliant.

<sup>\*\*</sup>Individual kits contain two latching blocks per package.



## Material

Latching Blocks—Zinc

#### **Related Product Data:**

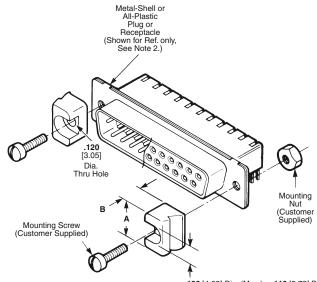
Connectors used with: HDE Metal-Shell or All-Plasticpages 112-115 HDF Metal-Shell or All-Plasticpages 125 & 126 HDP Metal-Shell—pages 90-102 HD Board Mount—pages 54-71, 78-85, 87-89

Mating/Panel Mounting—page 136

## **Technical Documents:**

Instruction Sheet—408-9128

**Latching Blocks** with Slot Recess and Thru Hole



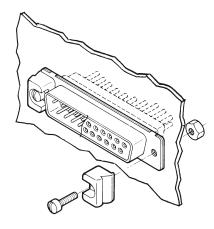
.196 [4.98] Dia. (Max.) x .110 [2.79] Deep Slot

Shell	Dimensions		Panel	Rear-Panel Lato	hing Block Part No.	Front-Panel Latching Block Part No	
(No. of Contact Pos.) A		В	Thickness	Individual	Bulk Packed*	Individual	
		<b>.160</b> 4.06	<b>.090</b> 2.29	747080-2	_	_	
1 thru 4 (9 thru 37)	<b>.400</b> 10.16	<b>.190</b> 4.83	<b>.060</b> 1.52	745245-2	745245-3	_	
		<b>.250</b> 6.35	_	_	_	745286-2	
5 (50)	<b>.530</b> 13.46	<b>.190</b> 4.83	<b>.060</b> 1.52	_	_	745245-5	

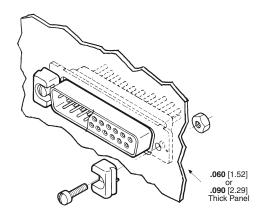
<sup>\*</sup>Bulk packed for multiple part orders.

- Notes: 1. Mounting screws and nuts are to be supplied by Customer.
  - 2. These latching blocks allow mounting screws to be installed thru the front of the block and to be screwed into the bracket of a right-angle connector, a fixed insert in a connector mounting flange, or a nut behind the connector mounting flange (as illustrated above).

    3. Latching blocks mate with spring latches (page 152).







Typical Application of Rear-Panel Mounted Subminiature D Connector using Rear-Panel Latching Blocks

Note: All part numbers are RoHS compliant.

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<sup>\*\*</sup>Individual kits contain two latching blocks per package.



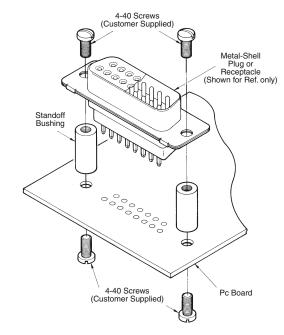
# **Standoff Bushings**

#### Material:

Aluminum

## **Related Product Data:**

Connectors used with: **HD Straight Posted**pages 76-85, 87-89



# 4-40 Threads (thru) .250 [6.35] **.435** [11.05]

#### Kit Numbers:

.115 Max [2.92] Dia.

205933-3 (two bushings per package)

#### 205933-4 (bulk packed)\*

Part Number: 206509-1

\*Parts are individually bulk packed for multiple part orders.

.200 ± .010 [5.08 ± 0.25]

Notes: 1. Keying plug is installed taper-end

first into front of receptacle.

2. Sold individually.

# **Keying Plug** (for Size 20 Socket Contacts)

#### Material:

Polyphenylene oxide

#### **Related Product Data:**

Connectors used with: All HDE, HDP and HD Receptacles with Socket Contacts

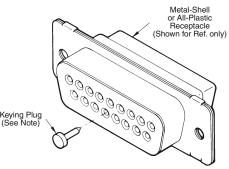
# **Keying Plug**

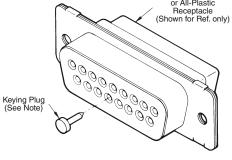
499712-1 AMP-LATCH (electrical connectors) can be used on **HD22 Socket Contacts** 

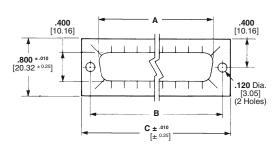
## **EMI/RFI Gaskets**

## **Material and Finish:**

Brass, .006 [0.15] thick; bright tin plated









Shell Size (No. of Contact Pos.)		Gasket		
	Α	В	С	Part No.
1 (9)	<b>.746</b> 18.95	<b>.984</b> 24.99	<b>1.220</b> 30.99	5747024-3
2	<b>1.074</b>	<b>1.312</b>	<b>1.555</b>	5747025-3
(15)	27.28	33.32	39.50	
3	<b>1.614</b>	<b>1.852</b>	<b>2.100</b>	745776-4
(25)	41.00	47.04	53.34	
4	<b>2.266</b>	<b>2.500</b>	<b>2.730</b>	745777-4
(37)	57.56	63.50	69.34	

Note: All part numbers are RoHS compliant.

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