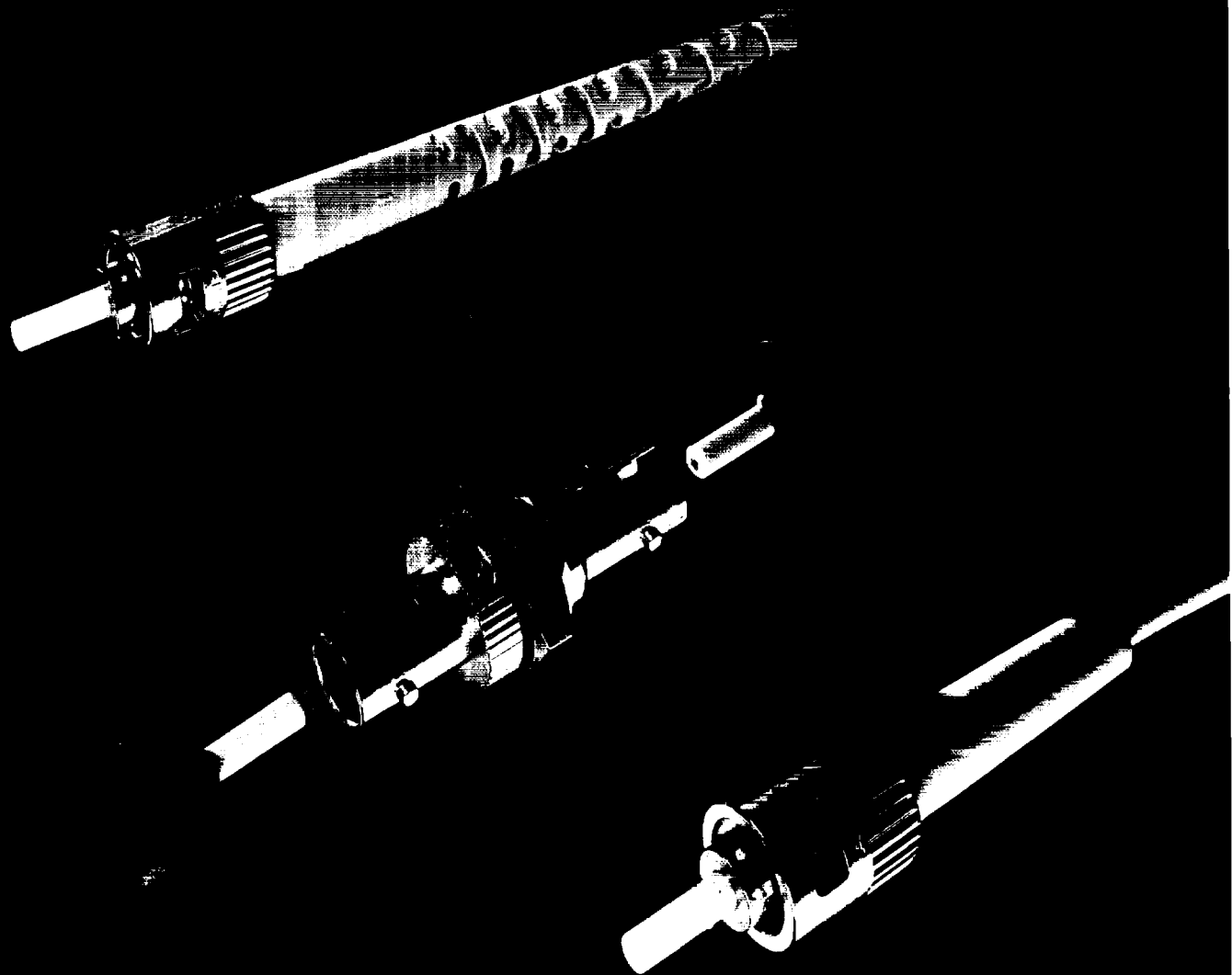


AMP

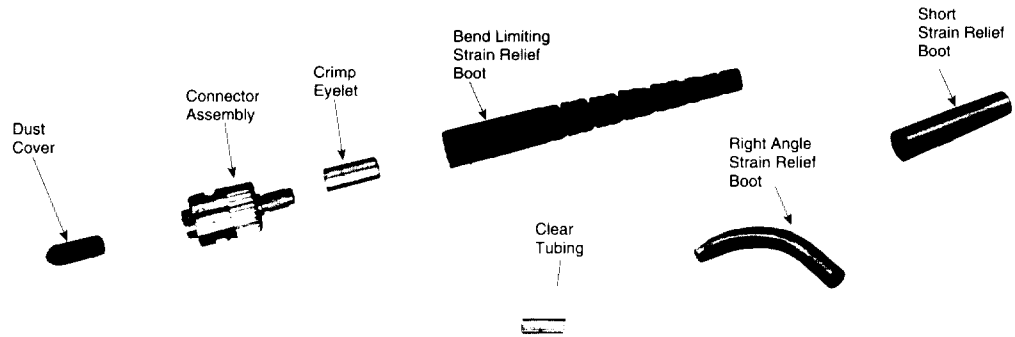
ST Style Fiber Optic Connectors



- ***Performance***
- ***Value***
- ***Selection***
- ***Service***

AMPIS097

Epoxy Style Connectors



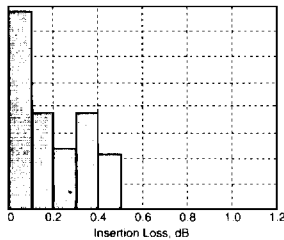
Epoxy Style Connectors

| | Multimode | Multimode | Multimode | Multimode | Multimode | Singlemode |
|-----------------------------------|-------------------|-----------------|--------------|-----------------|--------------|--------------|
| Ferrule Material | Composite Polymer | Stainless Steel | Ceramic | Stainless Steel | Ceramic | Ceramic |
| Body Material | Polymer | Polymer | Polymer | Aluminum | Ni. Br. | Ni. Br. |
| Coupling Nut Material | Polymer | Polymer | Polymer | Die Cast | Die Cast | Die Cast |
| Connector Type | 1 | 1 | 1 | 2 | 2 | 2 |
| Nominal Fiber Size, um | 125 | 125, 140 | 125 | 125 to 1,000 | 125, 140 | 126*, 127 |
| Performance Specifications | | | | | | |
| Insertion Loss | dB, Avg. 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 |
| Back Reflection | dB — | — | — | — | — | < -40 |
| Storage Temp. Range | C -40° to +85° | -40° to +85° | -40° to +85° | -40° to +85° | -40° to +85° | -40° to +85° |
| Operating Temp. Range | C -20° to +75° | -20° to +75° | -20° to +75° | -30° to +70° | -30° to +70° | -20° to +75° |
| Durability | cycles 500 | 500 | 1000 | 500 | 1,000 | 1,000 |
| | change (dB) < .20 | < .20 | < .20 | < .20 | < .20 | < .20 |
| Cable | Up to 3.0 mm | Up to 3.0 mm | Up to 3.0 mm | Up to 3.8 mm | Up to 3.8 mm | Up to 3.8 mm |
| Tools & Accessories | | | | | | |
| Tool Kit | 501282-9 | 501282-9 | 501282-9 | 501282-9 | 501282-9 | 501282-9 |
| Crimp Tool | 58433-4 | 58433-4 | 58433-4 | 58433-4 | 58433-4 | 58433-4 |
| Polishing Bushing | 503304-2 | 503304-1 | 503304-1 | 503337-1 | 503337-1 | 503337-1 |

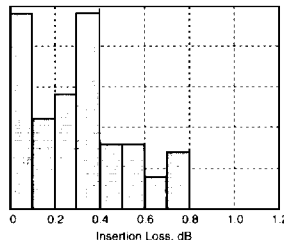
Various boot colors and styles available

* Standard Size

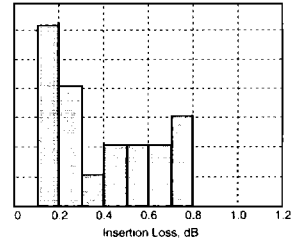
Insertion Loss of Polymer Composite Ferrule Connector Type 1



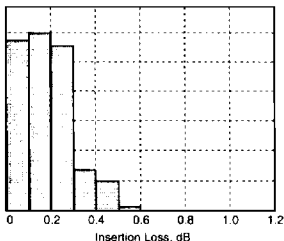
Insertion Loss of Stainless Steel Ferrule Connector Type 1



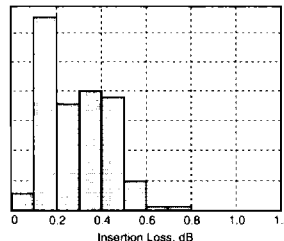
Insertion Loss of Ceramic Ferrule Connector Type 1



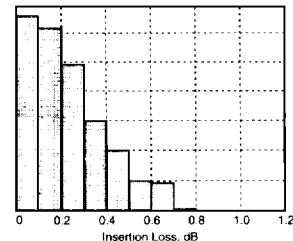
Insertion Loss of Stainless Steel Ferrule Connector Type 2



Insertion Loss of Ceramic Ferrule Connector Type 2



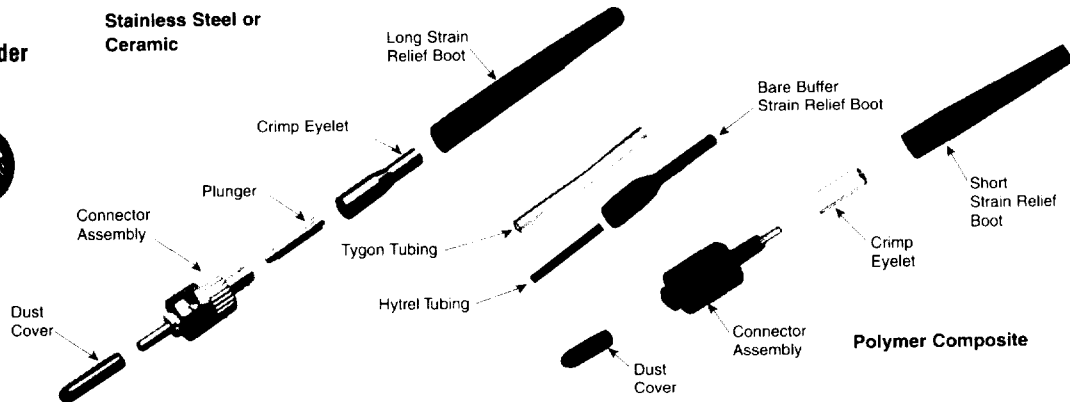
Insertion Loss of Ceramic Ferrule Connector Type 2 Singlemode



LightCrimp XTC Epoxyless Connectors

■ All connectors in this catalog are produced under a Quality Management System certified to ISO 9001

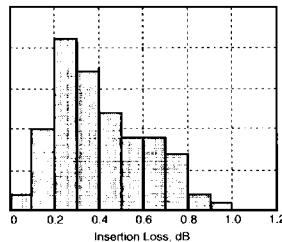
A copy of the certificate is available upon request



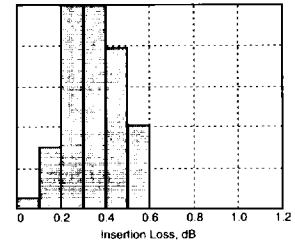
LightCrimp XTC Epoxyless Connectors

| | Multimode | Multimode | Multimode | Singlemode |
|-----------------------------------|-----------------------------|-----------------|---------------|---------------|
| Ferrule | Composite Polymer | Stainless Steel | Ceramic | Ceramic |
| Body | Polymer | Aluminum | Aluminum | Aluminum |
| Coupling Nut | Polymer | Die Cast Zinc | Die Cast Zinc | Die Cast Zinc |
| Connector Type | 3 | 4 | 4 | 4 |
| Nominal Fiber Size, um | 125 | 125, 140 | 125 | 126 |
| Performance Specifications | | | | |
| Insertion Loss | dB, Avg. | | 0.6 | 0.4 |
| Back Reflection | dB | | — | — |
| Storage Temperature Range | C | | -40° to +85° | -40° to +85° |
| Operating Temperature Range | C | | -20° to +60° | -10° to +65° |
| Durability | cycles | | 500 | 1,000 |
| | change (dB) | | < .20 | < .20 |
| Cable | Up to 3.0 mm for all | | | |
| Tools & Accessories | | | | |
| Tool Kit | 502708-1 | 503125-1 | 503125-1 | 503125-1 |
| Crimp Tool | 502835-1 | 503568-1 | 503568-1 | 503568-1 |
| Polishing Bushing | 503304-2 | 503337-1 | 503337-1 | 503337-1 |

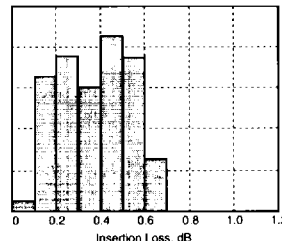
Insertion Loss of LightCrimp XTC Polymer Composite Ferrule Connector Type 3



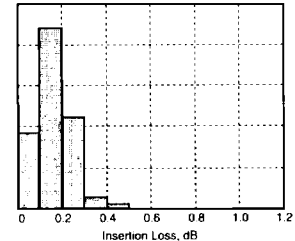
Insertion Loss of LightCrimp XTC Stainless Steel Ferrule Connector Type 4



Insertion Loss of LightCrimp XTC Multimode Ceramic Ferrule Connector Type 4



Insertion Loss of LightCrimp XTC Singlemode Ceramic Ferrule Connector Type 4



Epoxy Style Connectors

Ceramic Ferrule

- Zirconia ceramic
- PC finish
- High performance
- Closed-end die cast coupling nut

Part Numbers For Multimode Connectors

| Hole Size | | Connector Type | Boot Type & Color | Max. Cable Diameter | Instruction Sheet |
|------------|----------|----------------|---------------------|---------------------|-------------------|
| 125 | 140 | | | | |
| 501380-1 | 501380-2 | 2 | Bend Limiting/Black | 3.0 | 408-6935 |
| 1-501380-5 | — | 2 | Short/Black | 3.0 | 408-6935 |
| 502674-1 | 502674-2 | 2 | Right Angle/Black | 3.0 | 408-6935 |
| 502588-6 | — | 2 | Bend Limiting | 3.8 | 408-9722 |
| 503571-1 | — | 1 | Short Black | 3.0 | 408-9971 |

Part Numbers For Singlemode Connectors

| Hole Size | | Connector Type | Boot Type & Color | Instruction Sheet |
|-----------|----------|----------------|----------------------|-------------------|
| 126 | 127 | | | |
| 502579-2 | 502579-3 | 2 | Bend Limiting/Yellow | 408-9645 |
| 502580-2 | 502580-3 | 2 | Short/Yellow | 408-9645 |

Stainless Steel Ferrule

- Rugged stainless steel ferrules
- Closed-end die cast or polymer composite coupling nut.

Part Numbers For Multimode Connectors

| Hole Size | | Connector Type | Boot Type & Color | Max. Cable Diameter | Instruction Sheet |
|-----------|----------|----------------|-------------------|---------------------|-------------------|
| 125 | 140 | | | | |
| 504008-3 | 504008-7 | 2 | Long/Black | 3.1 | 408-9861 |
| 503416-1 | 503416-2 | 1 | Short/Black | 3.0 | 408-9971 |

Polymer Composite Ferrule

- Single-piece polymer composite ferrule/body
- High performance, low cost
- Closed-end polymer composite coupling nut.

Part Numbers For Multimode Connectors

| Hole Size 125 | Connector Type | Boot Type & Color | Max. Cable Diameter | Instruction Sheet |
|---------------|----------------|-------------------|---------------------|-------------------|
| 503415-1 | 1 | Short/Black | 3.0 | 408-9971 |

Bulk packaged epoxy style components, and kits with other strain relief colors are available. Contact AMP Incorporated

LightCrimp XTC Epoxyless Connectors

LightCrimp XTC

- ST-Style Interface
- No epoxy, no oven
- Easy termination
- Low installed cost

Part Numbers For Multimode Epoxyless LightCrimp XTC 125 μm

| Connector Type | Ferrule Type | Boot Type & Color | Buffer Diameter | Instruction Sheet | |
|----------------|--------------|-------------------|-----------------|-------------------|----------|
| 503453-1 | 3 | P | Short/Black | 250/900 | 408-4013 |
| 504034-1 | 4 | S | Long/Black | 250/900 | 408-9860 |
| 504001-1 | 4 | C | Long/Black | 250/900 | 408-9860 |

Part Number For Singlemode Epoxyless LightCrimp XTC

| | | | | | |
|----------|---|---|------------|---------|----------|
| 504000-1 | 4 | C | Long/Black | 250/900 | 408-9860 |
|----------|---|---|------------|---------|----------|

Ferrule Type Code:

C = Ceramic
S = Stainless Steel
P = Polymer Composite

These kits include a black strain relief and a protective boot for 900μm buffers.

Tool Kits

LightCrimp XTC Termination Kit

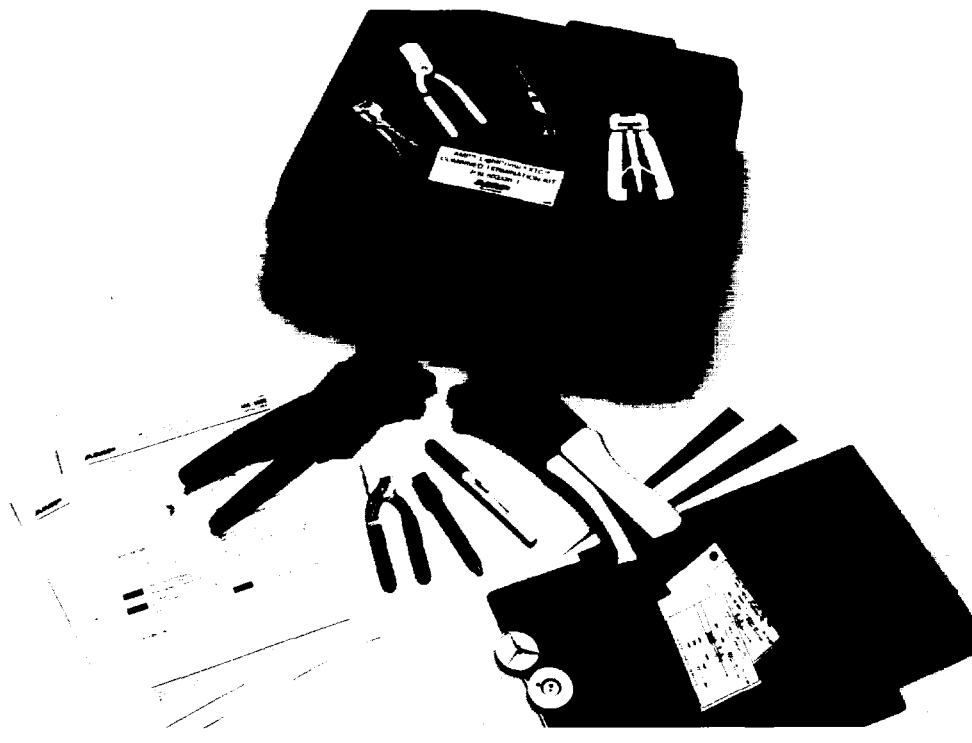
Part Number 503330-1

Includes all tools and accessories to terminate all LightCrimp XTCs.

Tool Kit (not shown)

Part Number 503330-2

Includes all tools and accessories to terminate all of the LightCrimp XTC connectors. Room available to add your own tools and supplies. Includes 100x, microscope shown below. (with ST-Style adapter only)



Termination Kits for Specific Connector Types

| Connector Type | | Base Tool Kit |
|--------------------|---------------------------------|---------------|
| Epoxy ST style | | 501282-9 |
| LightCrimp XTC | Stainless Steel or Ceramic Only | 503125-1 |
| All LightCrimp XTC | All Ferrule Types | 503330-1 |

Inspection Microscope Kit

Part Numbers

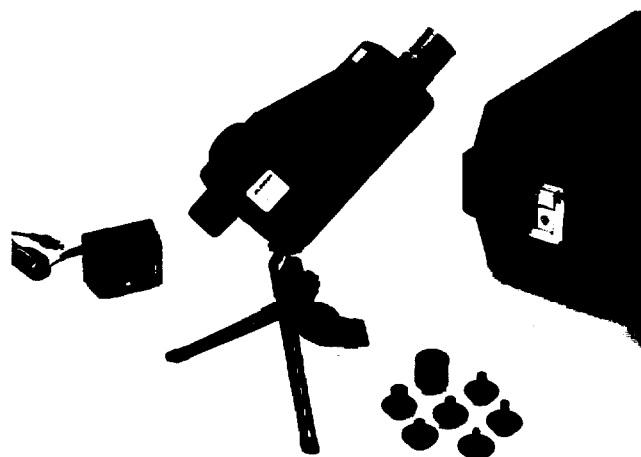
502970-1 (110V)

502970-2 (240V)

The Inspection Microscope is designed specifically for visual examination of terminated or cleaved ends of singlemode and multimode fibers in both field and laboratory applications. This portable, hand-held unit provides 100-power magnification for optimum detection of flaws. It operates on AC or battery power.

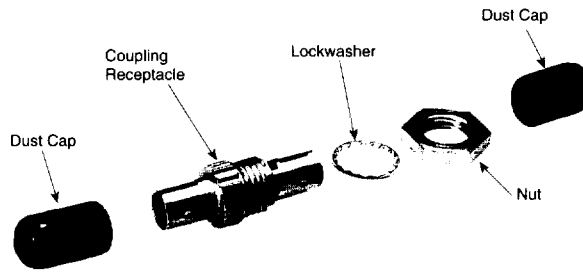
The complete microscope kit includes a handy carrying case, tripod stand, AC adapter and all adapters needed to inspect the following connectors:

- FSMA
- FSD
- ST Style
- Simplex
- FC Type
- D4 Type
- SC Type



Coupling Bushings

- Free-hanging or panel mount design
- Singlemode and multimode versions

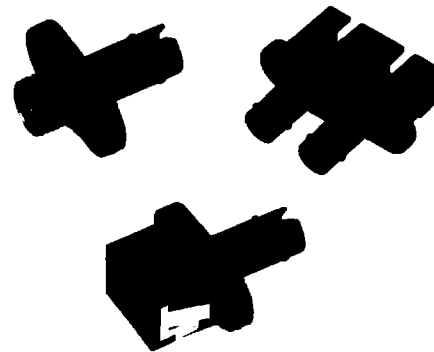


| Alignment Sleeve Material | Application | Packaging | Part Number |
|---------------------------|----------------------|-----------|-------------|
| Polymer Composite | Multimode | Single | 501381-1 |
| | | Single | 504021-1 |
| Metal | Singlemode/Multimode | Bulk (50) | 504021-2 |
| | | Single | 502750-1 |

Adapters

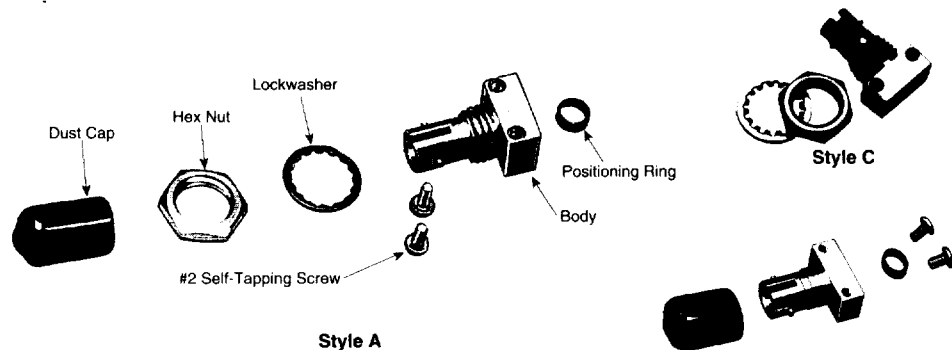
- Use for multimode or singlemode applications
- Available with mounting screws
- Adapt ST style to FC and SC Interface

| Part Number Description | |
|------------------------------|----------|
| ST Style to SC | |
| Metal Alignment Sleeve | 502780-1 |
| Ceramic Alignment Sleeve | 502780-4 |
| ST Style to FC | |
| Metal Alignment Sleeve | 502782-1 |
| Ceramic Alignment Sleeve | 502782-4 |
| Duplex ST style to SC | |
| Metal Alignment Sleeve | 503137-1 |
| Ceramic Alignment Sleeve | 503137-4 |



Active Device Mounts (Receptacles)

- Designed to accept multimode TO-18, TO-46, and TO-52 active devices
- Nickel plated, die cast zinc
- Mount to PCB or through panel
- Includes positioning ring



| Description | Packaging | Part Number | Style | Height |
|-----------------|-----------|-------------|-------|--------|
| Standard height | Single | 501474-1 | A | .410 |
| Low profile | Single | 502585-1 | B | .280 |
| Low profile | Single | 504022-2 | C | .314 |
| Low profile | Bulk (50) | 504022-3 | C | .314 |

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