

## Flexibility in a 2-Piece Adapter System

### Product Description

The Universal Modular Adapter (UMA) System is a two-piece, split adapter system that facilitates standardized equipment design and network configuration. The UMA base mounts in the faceplate adapter opening and accommodates the connector behind the faceplate. The UMA cap contains the alignment sleeve and supports the jumper connector.

Original Equipment Manufacturer (OEM) customers can choose the connector style that best fits their requirement behind the faceplate while allowing service provider customers the flexibility to choose a different connector type. Service providers can simplify their migration path to new connector types by adopting the UMA system in their fiber management hardware.

Attenuation is easily accomplished by replacing the standard "0" dB cap with an attenuated cap of the desired value. The unique split design allows easy access to the rear connector for cleaning, and eliminates the additional jumper protrusion from the panel caused when using typical build-on attenuators.

#### Features:

- Two-piece design
- Single-mode applications
- SC, ST, and LC Clothespin Bases
- SC, ST, FC, and LC Clothespin Straight Caps
- LC Base and LC Cap

#### Benefits:

- Allows cleaning the behind-the-wall connector from the front of the panel
- Customers can choose the type of connectors
- Allows OEMs to standardize on a single connector type while allowing service provider customers a choice of connector options
- Easy migration to new connector types

#### Applications:

- Optical networking equipment (long-haul, metro, local access, enterprise)
- Fiber optic distribution systems (LGX<sup>®</sup> distributing frames, building entrance equipment)



Universal Modular Adapter Family  
(2.5 mm Base)



Universal Modular Adapter Family  
(LC Clothespin Base and Cap)

### Adapters

The SC, ST, FC, and LC connectors are currently the most popular single-fiber connections in the communications industry. With the introduction of new hybrid adapter caps (SFF to 2.5 mm), the UMA system allows mating of different connector designs.






The UMA Base is mounted into a panel cutout and serves as the connector port behind the faceplate. The UMA Cap contains the alignment sleeve and serves as the mating connector port. The cap is attached to the base through a mechanical latching arrangement and together form the Universal Modular Adapter.



The LC UMA Family includes two different designs: an LC "clothespin" base that mates only to an LC "clothes-

pin” cap, and a new LC base that fits into a standard SC cutout.

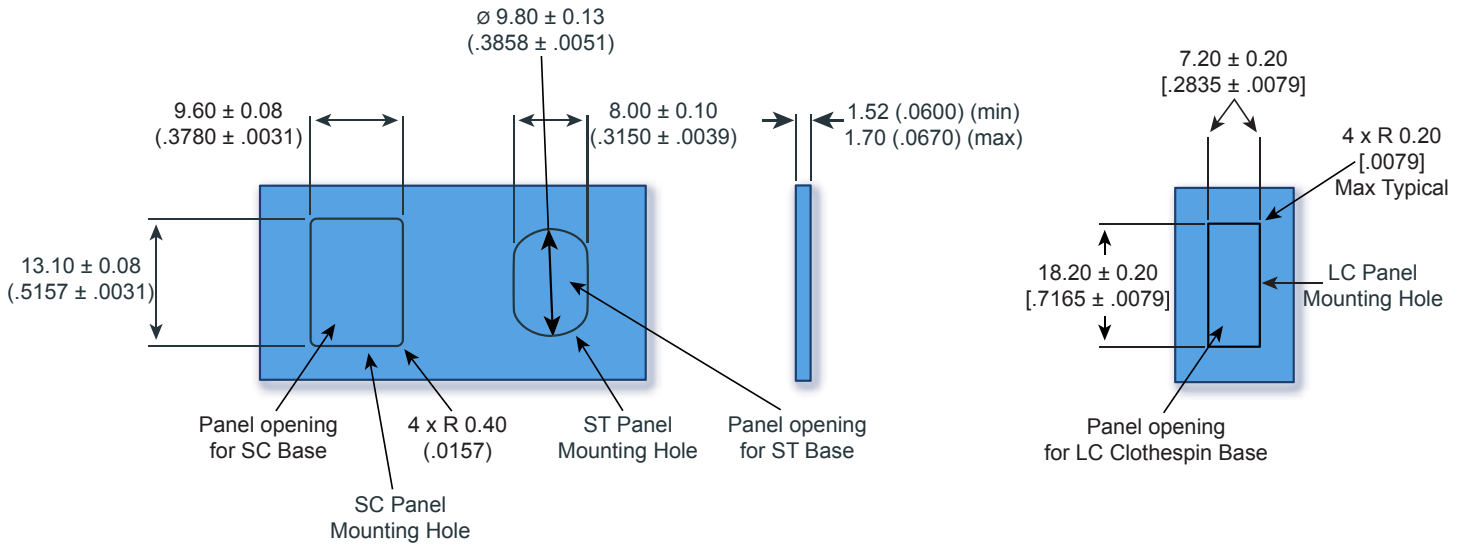
Hybrid UMA caps provide new functionality, allowing users to mate SFF LC jumpers to existing ST and SC

bases, and SC jumpers to the new LC base. The hybrid sleeve feature allows mating of connectors with different ferrule diameters.

2.5 mm UMA Base – Modular Adapter Ordering Information						
Description	Product Code	Comcode	Flange	Connector	Used With	
ST Base	A3002	106 709 140	Threaded-Panel ST opening	ST	A3060, A3070, A3080, FSAHS2-LC	
SC Base	A3003	106 750 763	Clip-Panel SC opening	SC	A3060, A3070, A3080 FSAHS2-LC	
SC Cap	A3060	106 708 951	—	SC	A3002, A3003	
ST Cap	A3070	106 795 354	—	ST	A3002, A3003	
FC Cap	A3080	106 795 404	—	FC	A3002, A3003	

1.25 mm LC Clothespin Base – Modular Adapter Ordering Information						
Description	Product Code	Comcode	Flange	Connector	Used With	
LC Base Clothespin	A1LCS- BASE	108 265 950	Clip-Panel LC Clothespin	LC	A1LCS-CAP	
LC Cap Clothespin	A1LCS	108 388 117	—	LC	A1LCS- BASE	





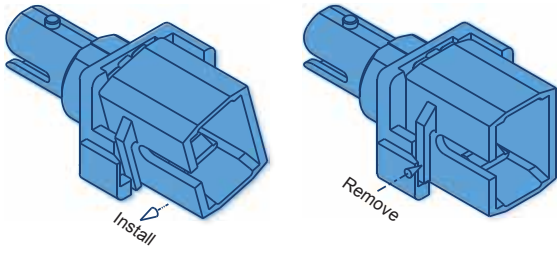
SC, ST and LC Mounting Hole Dimensions  
(dimensions in mm (inches))

### Hybrid vs. Standard UMA Caps – Distinguishing Differences

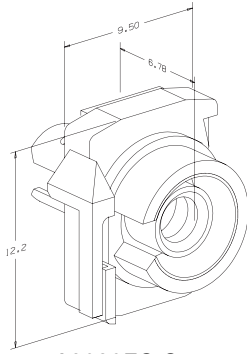
**Note:** Hybrid UMA caps (1.25 mm SFF to 2.5 mm ferrule) are distinguished from standard UMA caps (1.25 mm SFF to 1.25 mm SFF ferrule or 2.5 mm to 2.5 mm ferrule) by a white sleeve housing, providing easy identification in the field.

Cap Description	Product Code	Comcode	Sleeve Housing Color	Used With Base Type
SC Cap	A3060	106 708 951	Blue	A3002, A3003

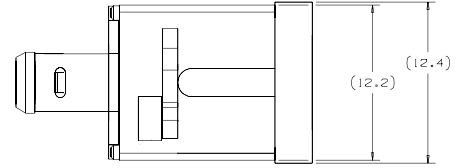
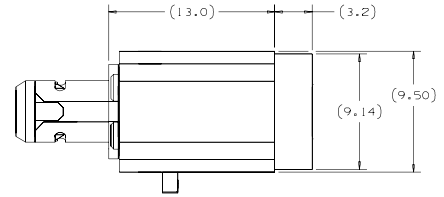




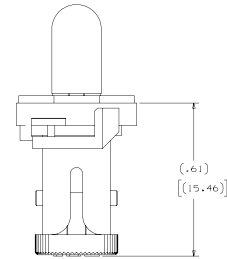
**Base and Cap Installation**



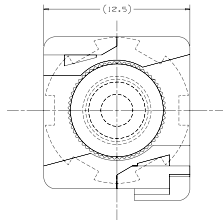
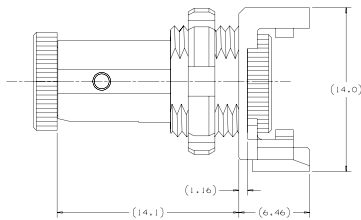
**A3080FC Cap  
(dimensions in mm)**



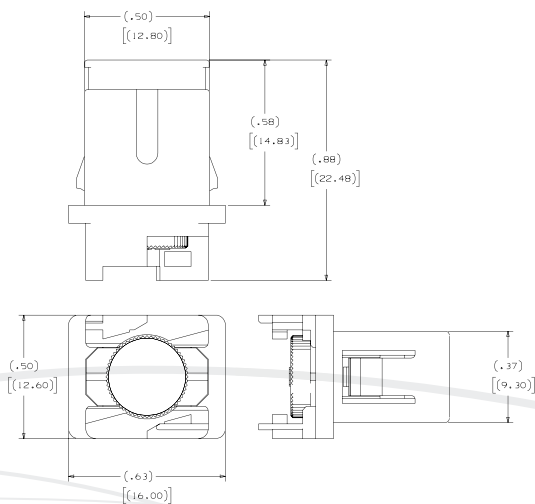
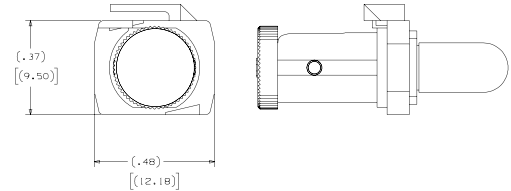
**A3060SC Cap  
(dimensions in mm)**



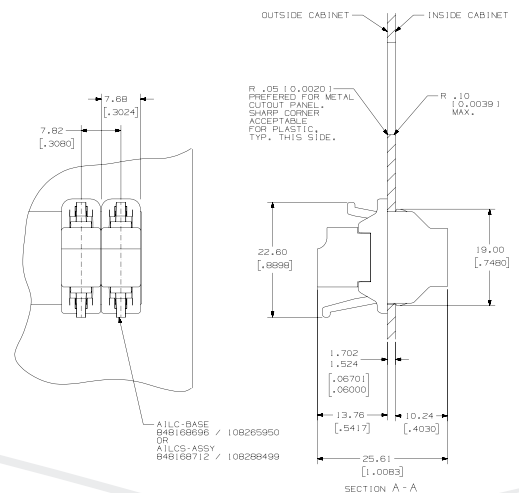
**A3070ST Cap  
(dimensions in inches)  
[(dimensions in mm)]**



**A3002ST Base  
(dimensions in mm)**







**A3003SC Base  
(dimensions in inches)  
[(dimensions in mm)]**



**A1LCS Assembly  
(dimensions in mm)  
[(dimensions in inches)]**

### Attenuator Identification

Description	Product Code	Connector	Color	Used With	
LC Attenuator	AALCS-xx.x	LC	Yellow	A1LCS Base	
SC Attenuator	ASCS-xx.x	SC	Light Green	A3003SC Base A3002ST Base	
ST Attenuator	ASTS-xx.x	ST	Green	A3003SC Base A3002ST Base	
FC Attenuator	AFCS-xx.x	FC	Light Green	A3003SC Base A3002ST Base	

### Attenuator Specifications ASCS, AFCS, ASTS, AALCS Series UMA Attenuator Caps

Characteristic	ASCS, AFCS, ASTS	AALCS (Clothespin)
Physical	Split Adapter Cap	Split Adapter Cap
Color	Green	Yellow
Transmission	Single-mode	Single-mode
Nominal Attenuation @ 1550 nm	See Table 2	See Table 2
Maximum Spectral Attenuation Variation (1530 to 1570 nm)	0.0125 times the nominal loss @ 1550 nm	0.0125 times the nominal loss @ 1550 nm
Attenuation Tolerance	See Table 3	See Table 3
Maximum Incident Optical Power Handling Capability	23 dBm	23 dBm
Reflectance	Typically -34 dB	Typically -34 dB
Operating Temperature	-40 to 75° C	-40 to 75° C
Matings over Life	200	200
Attenuator used only with base:	A3002 ST Base, A3003 SC Base	A1LCS Base (Clothespin)

**Note:** Nominal Attenuation Value is printed on visible part of body



### ST UMA Single-Mode Attenuator Caps Specifications and Ordering Information

Attenuator Caps Used With: A3002, A3003    Color: Green  
Maximum Reflectance: -30 dB

Product Code	Attenuation dB	Tolerance at 1550 nm ± dB	Comcode
ASTS01.0	1.3	0.25	108 572 199
ASTS01.5	1.5	0.25	109 020 297
ASTS02.0	2.0	0.25	108 572 207
ASTS02.5	2.5	0.25	109 020 248
ASTS03.0	3.0	0.25	108 053 059
ASTS03.5	3.5	0.25	108 053 067
ASTS04.0	4.0	0.25	108 053 075
ASTS04.5	4.5	0.25	108 053 083
ASTS05.0	5.0	0.25	108 053 091
ASTS05.5	5.5	0.25	108 053 109
ASTS06.0	6.0	0.25	108 053 117
ASTS06.5	6.5	0.25	108 053 125
ASTS07.0	7.0	0.25	108 053 133
ASTS07.5	7.5	0.25	108 053 141
ASTS08.0	8.0	0.25	108 053 158
ASTS08.5	8.5	0.25	108 053 166
ASTS09.0	9.0	0.25	108 053 174
ASTS09.5	9.5	0.25	108 053 182
ASTS10.0	10.0	0.25	108 053 190
ASTS11.0	11.0	0.5	108 053 208
ASTS12.0	12.0	0.5	108 053 216
ASTS13.0	13.0	0.5	108 053 224
ASTS14.0	14.0	0.5	108 053 232
ASTS15.0	15.0	0.5	108 053 240
ASTS16.0	16.0	0.5	108 053 257
ASTS18.0	18.0	1.0	108 053 265
ASTS20.0	20.0	2.0	108 053 273

### SC UMA Single-Mode Attenuator Caps Specifications and Ordering Information

Attenuator Caps Used With: A3002, A3003    Color: Light Green  
Maximum Reflectance: -30 dB

Product Code	Attenuation dB	Tolerance at 1550 nm ± dB	Comcode
ASCS01.0	1.3	0.25	108 538 760
ASCS01.5	1.5	0.25	109 020 271
ASCS02.0	2.0	0.25	108 538 778
ASCS02.5	2.5	0.25	109 020 214
ASCS03.0	3.0	0.25	108 314 469
ASCS03.5	3.5	0.25	108 314 477
ASCS04.0	4.0	0.25	108 314 485
ASCS04.5	4.5	0.25	108 314 493
ASCS05.0	5.0	0.25	108 314 501
ASCS05.5	5.5	0.25	108 314 519
ASCS06.0	6.0	0.25	108 314 527
ASCS06.5	6.5	0.25	108 314 535
ASCS07.0	7.0	0.25	108 314 543
ASCS07.5	7.5	0.25	108 314 550
ASCS08.0	8.0	0.25	108 314 568
ASCS08.5	8.5	0.25	108 314 576
ASCS09.0	9.0	0.25	108 314 584
ASCS09.5	9.5	0.25	108 314 592
ASCS10.0	10.0	0.25	108 314 600
ASCS11.0	11.0	0.5	108 440 496
ASCS12.0	12.0	0.5	108 440 504
ASCS13.0	13.0	0.5	108 440 512
ASCS14.0	14.0	0.5	108 440 520
ASCS15.0	15.0	0.5	108 440 538
ASCS16.0	16.0	0.5	108 440 546
ASCS18.0	18.0	1.0	108 440 553
ASCS20.0	20.0	2.0	108 440 561



### LC UMA Single-Mode Attenuator Caps Specifications and Ordering Information

*Attenuator Caps Used With:* A1LC-BASE      *Color:* Yellow  
*Maximum Reflectance:* -30 dB

<i>Product Code</i>	<i>Attenuation dB</i>	<i>Tolerance at 1550 nm ± dB</i>	<i>Comcode</i>
AALCS00.5	0.5	0.25	108 355 363
AALCS01.0	1.0	0.25	108 355 371
AALCS01.5	1.5	0.25	108 355 389
AALCS02.0	2.0	0.25	108 349 457
AALCS02.5	2.5	0.25	108 349 440
AALCS03.0	3.0	0.25	108 288 481
AALCS03.5	3.5	0.25	108 288 440
AALCS04.0	4.0	0.25	108 357 963
AALCS04.5	4.5	0.25	108 357 971
AALCS05.0	5.0	0.25	108 288 473
AALCS05.5	5.5	0.25	108 357 989
AALCS06.0	6.0	0.25	108 349 432
AALCS06.5	6.5	0.25	108 357 997
AALCS07.0	7.0	0.25	108 288 465
AALCS07.5	7.5	0.25	108 358 003
AALCS08.0	8.0	0.25	108 358 011
AALCS08.5	8.5	0.25	108 358 029
AALCS09.0	9.0	0.25	108 358 037
AALCS09.5	9.5	0.25	108 358 045
AALCS10.0	10.0	0.25	108 288 457
AALCS10.5	10.5	0.25	108 358 060
AALCS11.0	11.0	0.50	108 358 078
AALCS11.5	11.5	0.50	108 358 086
AALCS12.0	12.0	0.50	108 358 094
AALCS12.5	12.5	0.50	108 358 110
AALCS13.0	13.0	0.50	108 358 128
AALCS13.5	13.5	0.50	108 358 136
AALCS14.0	14.0	0.50	108 358 144
AALCS14.5	14.5	0.50	108 358 151
AALCS15.0	15.0	0.50	108 358 169
AALCS16.0	16.0	0.50	108 358 177
AALCS17.0	17.0	0.50	108 358 185
AALCS18.0	18.0	0.50	108 358 193
AALCS19.0	19.0	0.50	108 358 201
AALCS20.0	20.0	0.50	108 358 219



### FC UMA Single-Mode Attenuator Caps Specifications and Ordering Information

*Attenuator Caps Used With:* A3002, A3003      *Color:* Light Green  
*Maximum Reflectance:* -30 dB

<i>Product Code</i>	<i>Attenuation dB</i>	<i>Tolerance at 1550 nm ± dB</i>	<i>Comcode</i>
AFCS01.3	1.3	0.25	108 385 493
AFCS01.5	1.5	0.25	109 020 255
AFCS02.0	2.0	0.25	108 385 501
AFCS02.5	2.5	0.25	109 020 230
AFCS03.0	3.0	0.25	108 107 053
AFCS03.5	3.5	0.25	108 107 061
AFCS04.0	4.0	0.25	108 107 079
AFCS04.5	4.5	0.25	108 107 087
AFCS05.0	5.0	0.25	108 107 095
AFCS05.5	5.5	0.25	108 107 103
AFCS06.0	6.0	0.25	108 107 111
AFCS06.5	6.5	0.25	108 107 129
AFCS07.0	7.0	0.25	108 107 137
AFCS07.5	7.5	0.25	108 107 145
AFCS08.0	8.0	0.25	108 107 152
AFCS08.5	8.5	0.25	108 107 160
AFCS09.0	9.0	0.25	108 107 178
AFCS09.5	9.5	0.25	108 107 186
AFCS10.0	10.0	0.25	108 107 194
AFCS11.0	11	0.5	108 107 202
AFCS12.0	12	0.5	108 107 210
AFCS13.0	13	0.5	108 107 228
AFCS14.0	14	0.5	108 107 236
AFCS15.0	15	0.5	108 107 244
AFCS16.0	16	1.0	108 107 251
AFCS20.0	20	2.0	108 107 277



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