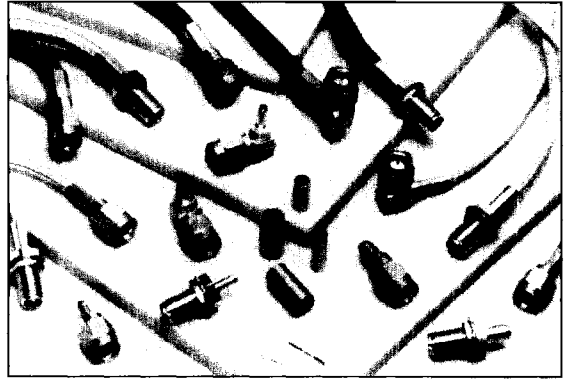


SMA Series

New OSM (SMA)[®], 3-Piece Connectors Reduce Installation Time

M/A-COM's new SMA cable connectors have been designed for moderate to high volume cable assembly manufacturing. Traditional SMA designs for straight plugs, right angle plugs and bulkhead jacks have been improved by reducing the number of loose piece parts in the packing bags. Fewer piece parts translate to a reduced total installed cost for attaching the connector to the cable. As your cable assembly volume goes up, so do your savings. At the same time, the crimped outer ferule features fast, consistent and reliable cable attachment with excellent cable retention. Center contacts can be either crimped or soldered. These 3-piece SMA connectors are available for the most popular flexible RG/U cables including 58, 141, 142, 174, 188, 223, 303, 316, 400 and double braided RD-316. They can be crimped using industry standard tooling to meet your current cable assembly requirements.

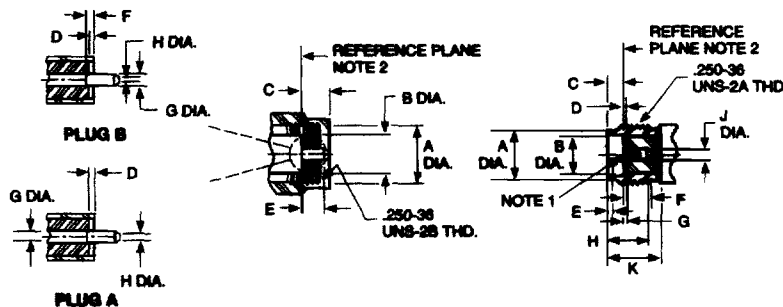


Passivated stainless steel construction provides excellent repeatable performance and can be directly substituted for the SMA's you are presently using. Lower cost does not mean you have to compromise your mechanical performance. Electrically and environmentally, these connectors meet or exceed the performance requirements for applications in Telecom, Datacom and Test and Measurement.

For SMA cable assembly requirements, M/A-COM's new connectors feature excellent performance at a lower installed cost. Call today for qualification samples.

OSM is a registered trademark of M/A-COM.

Typical SMA Interface Mating Dimensions



1. ID to meet VSWR and contact resistance when mated with .036 (+.0010 / -.005) (0.51 mm) dia. pin.
2. When fully engaged, the two reference planes must coincide with meta to meta contact.
3. Metric equivalents (to the nearest 0.01 mm) are given for general information only.

PLUG

Letter	Inches (Millimeters) ³	
	Minimum	Maximum
A	.250 (6.35)	—
B	—	.1808 (4.59)
C	—	.135 (3.43)
D	.000 (0.00)	.007 (0.25)
E	—	.100 (2.54)
F	.000 (0.00)	.010 (0.25)
G	.0355 (0.90)	.0370 (0.94)
H	.000 (0.00)	.015 (0.38)

JACK

Letter	Inches (Millimeters) ³	
	Minimum	Maximum
A	.208 (5.28)	.216 (5.49)
B	.1810 (4.60)	—
C	.075 (1.91)	.078 (1.98)
D	.000 (0.00)	.007 (0.25)
E	.015 (0.38)	.045 (1.43)
F	.115 (2.92)	—
G	.000 (0.00)	.010 (0.25)
H	.170 (4.32)	—
J	.049 (.124)	.051 (1.30)
K	.218 (5.54)	—

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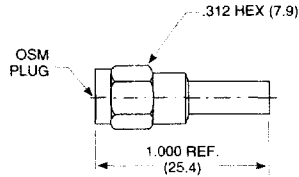
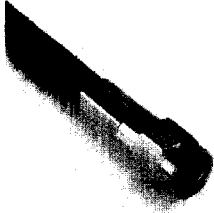
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SMA Series

FLEXIBLE CABLE / CRIMP ATTACHMENT

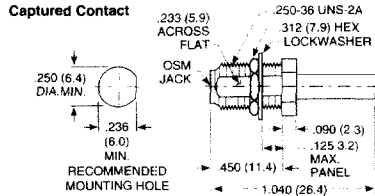
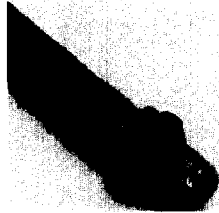
Straight Cable Plug Captured Contact



Part Number	Cable
2831-7388-02	RG-174/U 188/U 316
2831-7316-02	RD-316, Double Braid
2831-7358-02	RG-58/U 141, 303
2831-7341-02	RG-142/U 223, 400

Finish: Passivated stainless steel

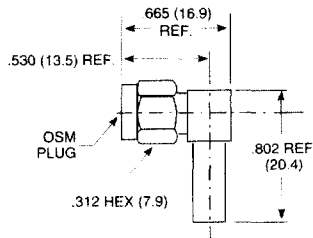
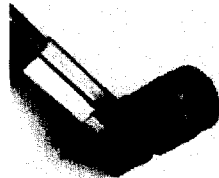
Bulkhead Feedthrough Cable Jack Captured Contact



Part Number	Cable
2834-7388-02	RG-174/U 188 316
2834-7316-02	RD-316, Double Braid
2834-7358-02	RG-58/U 141, 303
2834-7341-02	RG142/U 223, 400

Finish: Passivated stainless steel

Right Angle Cable Plug Captured Contact



Part Number	Cable
2837-7388-02	RG-174/U 188 316
2837-7316-02	RD-316, Double Braid
2837-7358-02	RG-58/U 141, 303
2837-7341-02	RG-142/U 223, 400

Finish Passivated stainless steel

Dimensions are in decimal inches, metric equivalents (to the nearest 0.1mm) are given in parenthesis for general information only.

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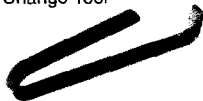
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SMA Series

HEX CRIMP ASSEMBLY TOOLS FOR 3-PIECE SMA

Hex Crimp Tool

Die Change Tool



Crimp Tool



Hex Die



Description	Part Number	Model Number
Crimp Frame	5698-5014-54	T-4718
Die Crimp Tool	5698-5017-54	T-4703

Hex Die Part Number	Die Cavity	Hex Size $\pm .003$	For Use With RG/U Cable
5698-5015-54	A	.105	178B & 196A
	B	.213	55B, 58C, 141A, 142B, 223, 303 & 400
	C	.128	174, 174B, 179, 187A, 188A & 316
2598-5379-54	—	.128	174, 174B, 179, 187A, 188A & 316
2098-0323-54	—	.151	RD-316

For Center Contact Crimping

2598-5379-54	—	.042	—
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Econo-Crimp

Crimp Tool



Hex Die



Description	Part Number
Crimp Frame	2598-5006-54

Hex Die Part Number	Die Cavity	Hex Size $\pm .003$	For Use With RG/U Cable
2598-5007-54	A	.105	178B & 196A
	B	.213	55B, 58C, 141A, 142B, 223, 303 & 400
	C	.128	174, 174B, 179, 187A, 188A & 316
2598-5380-54	—	.151	

For Center Contact Crimping

2598-5380-54	—	.042	—
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SMA Series

3-Piece SMA Typical Assembly Procedure for Right Angle Plug Connectors

	<ol style="list-style-type: none"> Slide crimp sleeve over cable, and trim cable to dimensions shown and tin the inner conductor. NOTE: Be careful not to nick the braid or center conductor.
	<ol style="list-style-type: none"> Place locator tool onto the housing assembly. (Recommended for maintaining correct interface dimensions). Insert the cable into back end of the housing assembly as shown, nesting the cable center conductor into the connector center conductor slot as shown. Solder center contact to cable center conductor as shown.
	<ol style="list-style-type: none"> Slide crimp sleeve over the braid and crimp using the proper die cavity for the cable being used. Remove locator tool from housing assembly if being used.
	<ol style="list-style-type: none"> Insert cap into housing opening as shown and dimple or lightly punch center of cap for retention in housing. Option: Solder or epoxy cap into place being careful to avoid leakage into the housing assembly.

Hex Size	Cable Type
.128	RG-174, 188, 316
.213	RG-58, 141, 142, 223, 303, 400
.151	RD-316

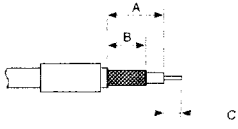

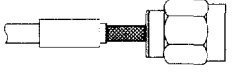
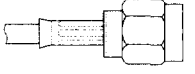
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SMA Series

3-Piece SMA Typical Assembly Procedure for Straight Plug & Bulkhead Jack Connectors

	<p>1. Slide crimp sleeve over cable, and trim cable to proper dimensions as shown in chart. NOTE: Be careful not to nick the braid or center conductor.</p>
	<p>2. Solder center contact onto center conductor of the cable as shown. Option: Crimp center contact. See Notes 1 and 2 below.</p>
	<p>3. Press prepared cable into the housing until it snaps into place. Place cable braid over back end of the housing.</p>
	<p>4. Slide crimp sleeve over cable braid and crimp using the proper die cavity for the cable being used.</p>

A plug body is shown, but these instructions are relevant to both plugs and jacks.

3-Piece SMA Connector Type	Cable Strip Dimensions ($\pm .005$)		
	A	B	C
Plug	.315	.275	.085
Jack	.325	.275	.085

For Outer Contact Crimping	
Hex Size	Cable Type
.128	RG-174, 188, 316
.213	RG-58, 141, 142, 223, 303, 400
.151	RD-316
For Center Contact Crimping	
042	All Cable Types

Notes:

- For center contact crimping, use Hex Die 2598-5380-54 in the Econo-Crimp tool or use Hex Die 2598-5379-54 in the Hex Crimp Tool.
- Crimping of solid center conductor cable is not recommended.

Dimensions are in decimal inches, metric equivalents (to the nearest 0.1mm) are given in parenthesis for general information only.

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