

CABLE DRAWING: **CAB-0XXX (SALEM CODE)**

DRAWING TITLE:
SBC RF-Clock Cable

DRAWING NO.: MWACAB-0032	DRAWN BY: DRC	DATE: 18-Dec-09	REV: A
		SHEET: 1 of 3	

Cable Detail:

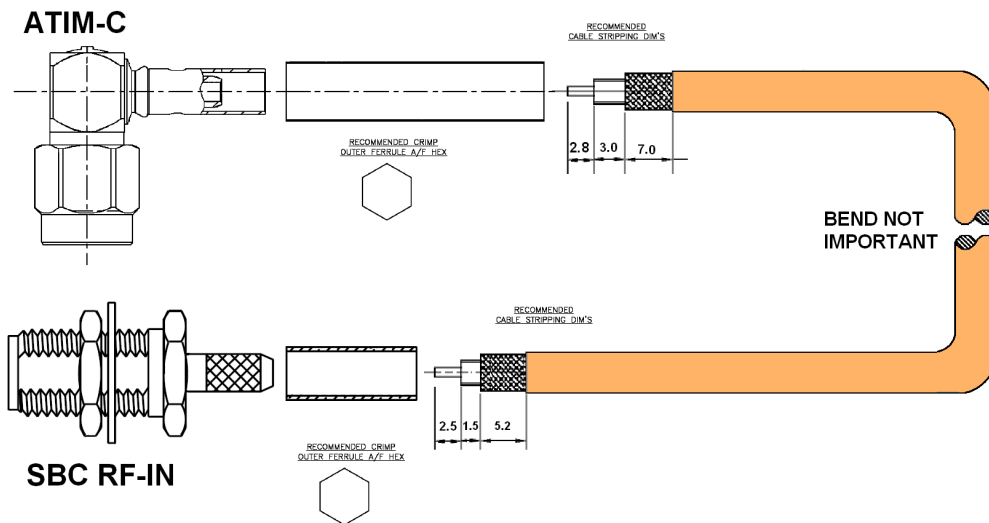
Connectors:	Description	Parts (Qty)
ASC-PCB	R125-172-000 R/A SMA Male Crimp for RG174/RG316/RG188	See Note1 Below(1)
ASC_OUT	AMPHENOL RF - 901-9875 SMA Bulkhead Jack	See Note2 Below(1)
Conductors:		
Cable	RG 316 Single Screen Cable DC-3GHz, 1.5dB/m@3GHz, Mil-C-17/113-RG316	See Note3 Below(??)
Misc:		
-		

Overall Length ??+/-5mm

Notes:

1. The SMA R/A Plug connector can be supplied from Rojone #R125-172-000 or PSI stock (CON-0171). Any equivalent will be OK refer to data sheets supplied with this drawing.
2. The SMA Bulkhead Jack connector can be supplied from Farnell #170-4359. Any equivalent will be OK refer to data sheets supplied with this drawing.
3. The cable can be supplied from Rojone #CC-M17_113_RG316 or PSI stock (CAB-0182) Any equivalent will be OK refer to data sheets supplied with this drawing

Typical Drawing:



REVISION

Date	Rev	Remarks
18/12/09	A	Draft

CABLE DRAWING:

CAB-0XXX (SALEM CODE)

DRAWING TITLE:

SBC RF-Clock Cable

DRAWING NO.:
MWACAB-0032

DRAWN BY:
DRC

DATE: 18-Dec-09

SHEET: 2 of 3

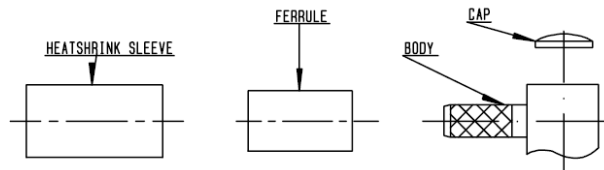
REV:

A

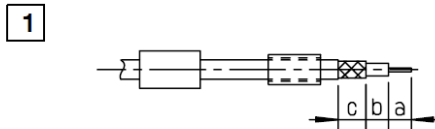
Assembly Details:

ATIM-Control-PCB End

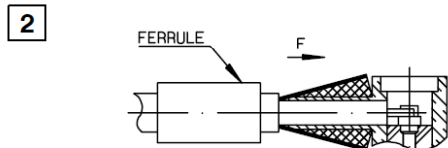
M 11



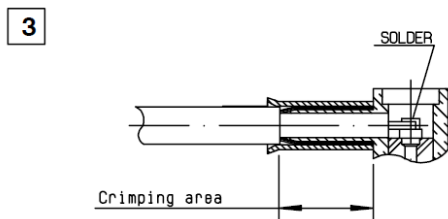
P/N	Stripping length			Hex. dim H	Crimp tools	
	a	b	c		Dies included	MIL standard R282 293 000 (M22520/5-01)+DIES
R125 172 000	2.8	3	7	3.25	R282 211 000	R282 235 003 (M22520/5-03)



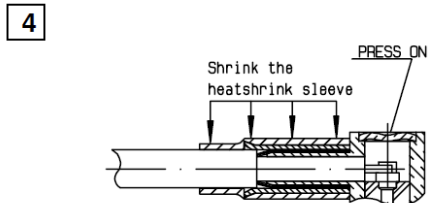
- 1.1 Slide onto the cable the ferrule and the heatshrink sleeve .
- 1.2 Strip the cable .



- 2.1 Fan the braid .
- 2.2 Push connector body under the braid
- 2.3 Slide the ferrule on the braid (in direction F)



- 3.1 Crimp the ferrule.
- 3.2 Solder inner conductor .



- 4.1 Place the cap .
- 4.2 Press cap flush or slightly below surface of body assembly . Slide sleeve over ferrule and heatshrink in place.

REVISION

Date	Rev	Remarks
18/12/09	A	Draft

CABLE DRAWING:

CAB-0XXX (SALEM CODE)

DRAWING TITLE:

SBC RF-Clock Cable

DRAWING NO.:
MWACAB-0032

DRAWN BY:
DRC

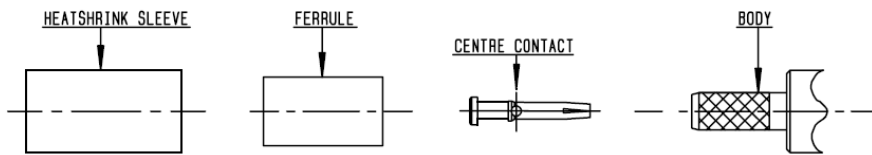
DATE: 18-Dec-09

REV:

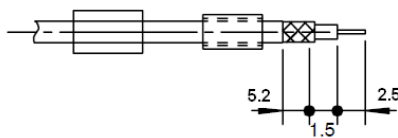
SHEET: 3 of 3

A

SBC RF-IN End

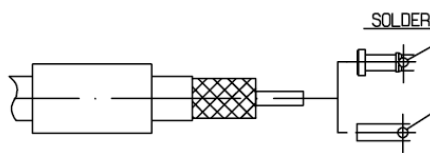


1



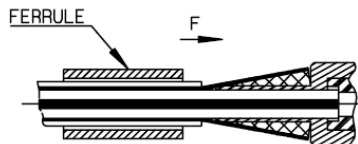
- 1.1 Slide onto the cable the ferrule and the heatshrink sleeve .
- 1.2 Strip the cable .

2



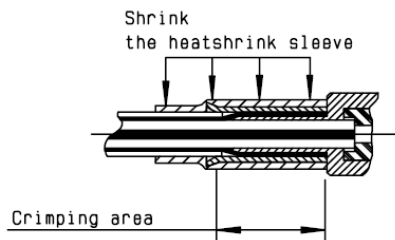
- 2.1 Slide on centre contact until it bottoms against cable dielectrique
- 2.2 Crimp or solder center contact
- 2.3 Clean soldering area .

3



- 3.1 Fan the braid .
- 3.2 Slide the cable into the body until it bottoms against insulator .
- 3.2 Slide the ferrule over the braid . (In direction F)

4



- 4.1 Crimp the ferrule.
- 4.2 Cut the excess of braid .
- 4.3 Slide sleeve over ferrule and heatshrink in place .

Connection Detail:

From: (ATIM-C-PCB)

Attached to the ATIM-C PCB SMA Connetors

To: (SBC RF-IN)

ATIM-C SMA Connector Inputs

REVISION

Date	Rev	Remarks
18/12/09	A	Draft

SMA Brass Angle Plugs & Bulkhead Jacks

Fig. 1

SMA Angle Plug, Crimp
901-9872▲
 Gold Plated for RG-174, 188, 316
901-9873▲
 Gold Plated for RG-58
901-9874▲
 Gold Plated for RG-141, 223
901-9880-RFX▲
 Nickel Plated for RG-58
901-9881-RFX▲
 Nickel Plated for RG-174, 188, 316
901-10028-RFX
 Gold Plated for RD-174, 188, 316
901-10029-RFX
 Nickel Plated for RD-174, 188, 316

Fig. 2

SMA Low Profile Angle Plug, Crimp
901-9902
 Nickel Plated for RG-141, 223

Fig. 3

SMA Bulkhead Jack, Crimp
901-9875▲
 Gold Plated for RG-174, 188, 316
901-9879-RFX▲
 Nickel Plated for RG-174, 188, 316

Fig. 4

SMA Bulkhead Jack with O-Ring
901-10013-RFX
 RG-174, 188, 316

SMA BRASS ANGLE PLUGS

Cable RG-/U	Connector Description	Cable Attachment		c Dia In. (mm)	CAI	Ins.	Notes	Amphenol Number	Fig.
		Outer	Inner						
58	Angle Plug	Crimp	Solder	.210(5.3)	C53	D1	Gold Plated Body	▲ 901-9873	1
	Angle Plug	Crimp	Solder	.210(5.3)	C53	D1	Nickel Plated Body	▲ 901-9880-RFX	1
174, 188, 316	Angle Plug	Crimp	Solder	.128(3.3)	C57	D1	Nickel Plated Body	▲ 901-9881-RFX	1
	Angle Plug	Crimp	Solder	.128(3.3)	C57	D1	Gold Plated Body	▲ 901-9872	1
	Angle Plug	Crimp	Solder	.128(3.3)	C57	D1	Gold Plated Body	901-10028-RFX	1
	Angle Plug	Crimp	Solder	.128(3.3)	C57	D1	Nickel Plated Body	901-10029-RFX	1
	Angle Plug	Crimp	Solder	.128(3.3)	C57	D1	Nickel Plated Body	901-10029-RFX	1
141, 223	Angle Plug	Crimp	Solder	.220(5.6)	C53	D1	Gold Plated Body	▲ 901-9874	1
141, 223	Low Profile Angle Plug	Crimp	Solder	.220(5.6)	C53	D1	Plated Body	901-9902	2

SMA BRASS BULKHEAD JACKS

Cable RG-/U	Connector Description	Cable Attachment		c Dia. In. (mm)	CAI	Ins.	Notes	Amphenol Number	Fig.
		Outer	Inner						
174, 188, 316	Bulkhead Jack	Crimp	Solder	.128(3.3)	C53	D1	Gold Plated Body	▲ 901-9875	3
	Bulkhead Jack	Crimp	Solder	.128(3.3)	C53	D1	Nickel Plated Body	▲ 901-9879-RFX	3
	Bulkhead Jack	Crimp	Solder	.128(3.3)	C53	D1	Nickel Plated Body	901-10013-RFX	4

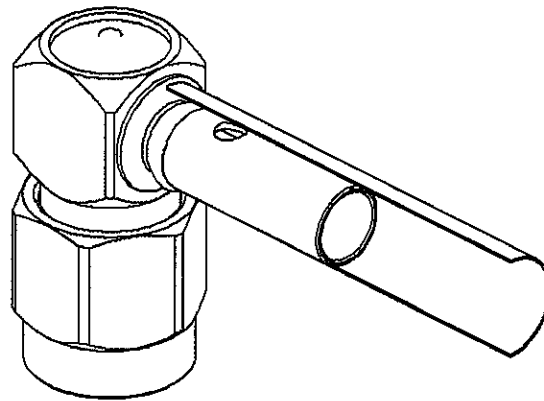
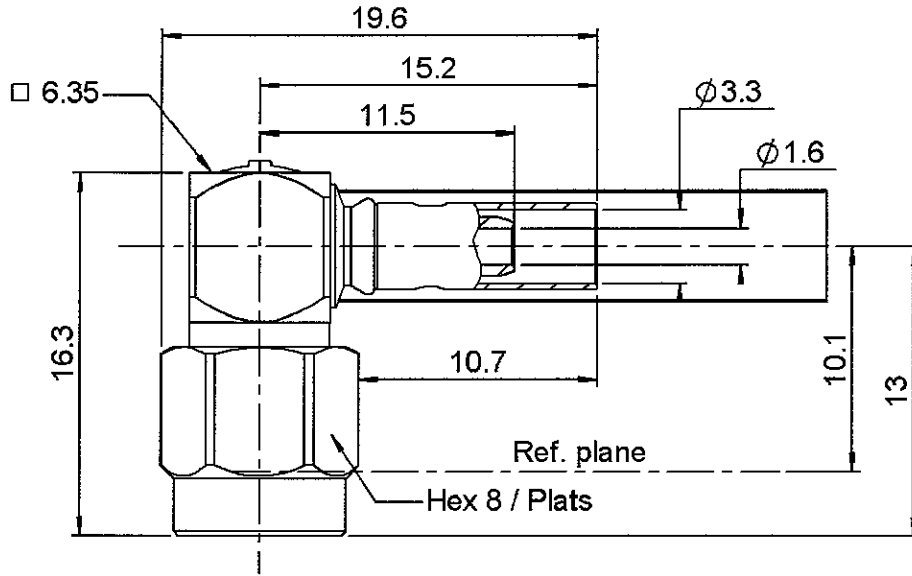
▲ distributor stocked

RIGHT ANGLE PLUG CRIMP OR SOLDER TYPE

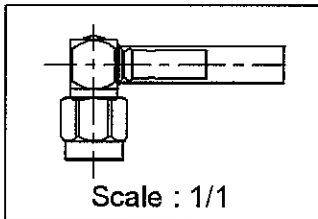
R125.172.000

CABLE 2.6/50 S

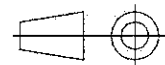
Series : SMA



CECC 22111-810-01



All dimensions are in mm.



COMPONENTS	MATERIALS	PLATINGS (µm)
BODY	STAINLESS STEEL	GOLD 0.5 OVER NICKEL 2
CENTER CONTACT	BRASS	GOLD 1.3 OVER NICKEL 2
OUTER CONTACT	-	-
INSULATOR	PTFE	
GASKET	FLUORE SILICONE	
OTHERS PARTS	STAINLESS STEEL	GOLD 0.5 OVER NICKEL 2
-	-	-
-	-	-

Issue : 0539 G

In the effort to improve our products, we reserve the right to make changes judged to be necessary.



RADIALL®

RIGHT ANGLE PLUG CRIMP OR SOLDER TYPE

R125.172.000

CABLE 2.6/50 S

Series : SMA

PACKAGING

Standard	Unit	Other
100	'W' option	Contact us

SPECIFICATION

ELECTRICAL CHARACTERISTICS

Impedance		50 Ω
Frequency		0-12.4 GHz
VSWR	1.15 +	0.03 x F(GHz) Maxi
Insertion loss		0.15 √F(GHz) dB Maxi
RF leakage	- (60 - F(GHz)) dB Maxi
Voltage rating		250 Veff Maxi
Dielectric withstanding voltage		750 Veff mini
Insulation resistance		5000 MΩ mini

CABLE ASSEMBLY

Stripping	a	b	c	d	e	f
mm	2.8	7	12.8	0	10	0

Assembly instruction : **Crimp 05**

Recommended cable(s)
 KX 3B
 RG 188
 RG 316
 KX 22A
 RG 174 FTX
 RG 174
 ECO 316

Characteristics indicated on this data sheet are those that can be achieved with the highest performance cable. Intrinsic limitations of the cable may diminish the performance of the assembly

Cable retention
 - pull off **90** N mini
 - torque **NA** N.cm

MECHANICAL CHARACTERISTICS

Center contact retention		
Axial force – Mating end	27	N mini
Axial force – Opposite end	27	N mini
Torque	2.8	N.cm mini

Recommended torque		
Mating	100	N.cm
Panel nut	NA	N.cm
Clamp nut	NA	N.cm
A/F clamp nut	0	mm

Mating life	500	Cycles mini
Weight	4.3	g

TOOLING

Part Number	Description	Hexagon
R282.211.000	CRIMPING TOOL	3.25
R282.235.003	CRIMPING DIES	3.25
R282.293.000	CRIMPING TOOL	

OTHERS CHARACTERISTICS

ENVIRONMENTAL

Operating temperature	-65/+165	°C
Hermetic seal	NA	Atm.cm3/s
Panel leakage	NA	

Issue : 0539 G

In the effort to improve our products, we reserve the right to make changes judged to be necessary.



RADIALL®

This specification describes a 50-ohm high temperature coaxial cable constructed to meet the requirements of Mil-C-17/113-RG316.

CONDUCTOR

Material: Silver-coated Copper Covered Steel
 Size: AWG 25
 Construction: 7 x .0067
 OD(nom): .0201"

INSULATION

Material: Extruded PTFE
 OD(nom): .059"

SHIELD

Material: Silver-coated Copper Braid
 Size: AWG 38
 Coverage(nom): 95.9%
 OD(nom): .077"

JACKET

Material: Extruded FEP
 OD: .098" ± .004"

COLOR

Natural
 Jacket: Translucent Brown

CABLE CHARACTERISTICS

Impedance: 50 +/- 2 ohms
 Capacitance(max): 32 pF/ft
 Weight(max): 12.2 lbs/1,000 ft

Frequency (MHz)	Attenuation (dB/100 ft)
50	7.5
100	11
400	21
1000	38
3000	58

All of the statements, illustrations, technical information and recommendations contained herein are based on tests and other information Tensolite Company believes to be reliable, but the accuracy or the completeness thereof or the suitability of the product described herein for a particular application or use is not guaranteed, and this disclaimer is made in lieu of all warranties either expressed or implied.

TENSOLITE CONFIDENTIAL

This document, containing proprietary information of the Tensolite Company, is strictly confidential and is not to be disclosed by any person without the written consent of the Tensolite Company.

TENSOLITE COMPANY
 SUBSIDIARY OF CARLISLE CORPORATION
 ST. AUGUSTINE, FL

Drawn by: **Chris Lowe** Date: **1/16/97**

Approved By: **John Beatty** Date: **1/16/97**

Customer Spec

Tensolite P/N File
M17/113-RG316

-	1/16/97	Redrawn