

DESIGNED AND DIMENSIONED IN MILLIMETERS[INCHES]
ALL DIMENSIONS REFERENCE EXCEPT AS SHOWN

DO NOT
SCALE FROM
THIS PRINT

THIS PRODUCT MANUFACTURED
WITH LEAD-FREE PROCESSING

RF180-XXXX-XXXXXX-XXXX

CABLE CALLOUT
180: CCA-180-MPTFE

OVERALL ASSEMBLY LENGTH (OAL)
XXXX (MILLIMETERS)
(0152 MIN)

END 1 CONNECTOR
(SEE TABLE 2, SHT 2)

END 2 CONNECTOR
(SEE TABLE 2, SHT 2)

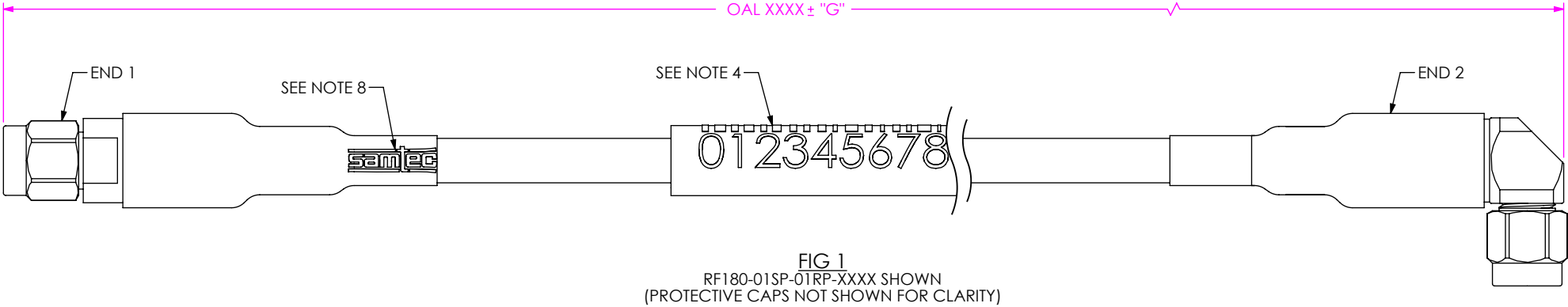


FIG 1
RF180-01SP-01RP-XXXX SHOWN
(PROTECTIVE CAPS NOT SHOWN FOR CLARITY)

TABLE 1	
OVERALL LENGTH	"G"
0100-0300 [3.93-11.81]	+5.0 [.20] / -0.0 [.00]
0301-1500 [11.85-59.01]	+12.0 [.47] / -0.0 [.00]
1501-3000 [59.09-118.11]	+25.0 [.98] / -0.0 [.00]
3001-7500 [118.15-295.28]	+50.0 [1.97] / -0.0 [.00]
7501-9999 [295.31-393.67]	+1% / -0.0 [.00]

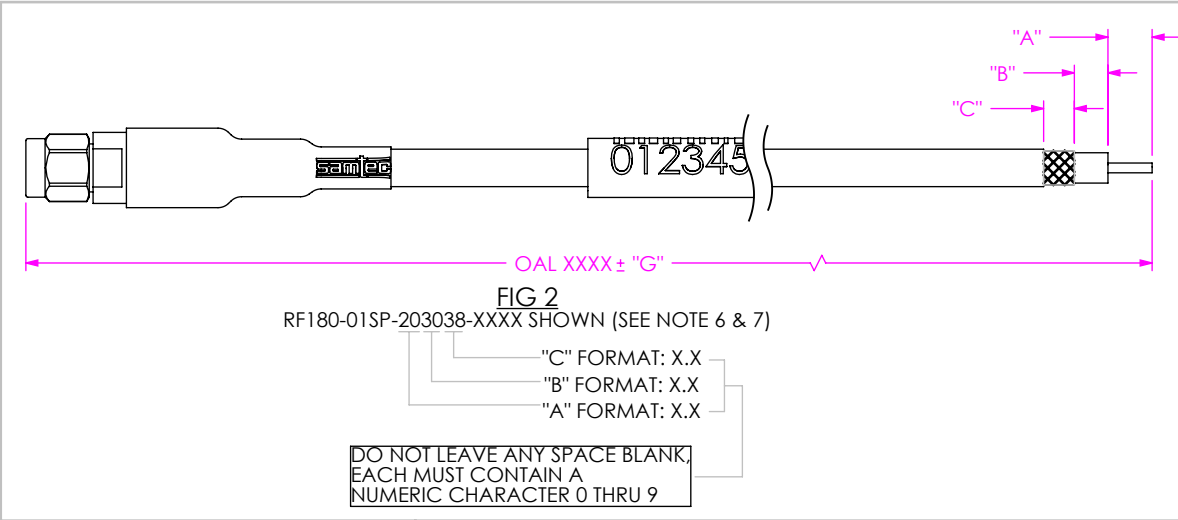


FIG 2
RF180-01SP-203038-XXXX SHOWN (SEE NOTE 6 & 7)

"C" FORMAT: X.X
"B" FORMAT: X.X
"A" FORMAT: X.X

NOTES:

- CONNECTORS TO BE ORIENTED ACCORDING TO CO-RF-WI-3048-M.
- AFTER FINAL ELECTRICAL TEST, LABEL EACH CABLE ASSEMBLY WITH 1 LABEL-ET.
- CABLE ASSEMBLY TO HAVE PROTECTIVE CAP ASSEMBLED ON EACH END AND TO BE INDIVIDUALLY PACKAGED IN ESD BAG.
- ASSEMBLY TO BE 100% TESTED FOR RETURN LOSS AND INSERTION LOSS, LABEL EACH INDIVIDUAL CABLE ASSEMBLY WITH 1 LABEL-SER-02. RETURN LOSS SPECIFICATION IS EQUAL TO THE HIGHEST END OPTION LIMIT (SEE TABLE 3).
- TRIM DIELECTRIC AS NEEDED TO MEET FLUSH SPEC.
- DIM "A", "B", AND "C" HAVE A MINIMUM VALUE OF 0.0mm & A MAXIMUM VALUE OF 9.9mm[.39"].
- FOR STRIPPED AND TINNED OPTION, BOTH THE CENTER CONDUCTOR & SHIELD ARE TINNED.
- SAMTEC LOGO EXISTS AT END1 ONLY.

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DO NOT SCALE DRAWING
SHEET SCALE: 3:2

MATERIAL:
CENTER CONTACT: BeCu
OUTER CONTACT: STAINLESS STEEL
INSULATORS: PTFE

520 PARK EAST BLVD, NEW ALBANY, IN 47150
PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail: info@SAMTEC.com code 55322

DESCRIPTION:
RF180 CABLE ASSEMBLY

DWG. NO.
RF180-XXXX-XXXXXX-XXXX

BY: HENSON T 10/13/2020 SHEET 1 OF 7

TABLE 2

END OPTION	SERIES	GENDER	FINISH		CONNECTOR KIT P/N (PCI P/N)	FIGURE
			CENTER CONTACT	OUTER CONTACT		
-01SP	SMA	PLUG	50μ" GOLD	PASSIVATED	PRF01-P-C-EP-142-SS (3163)	SHT 3, FIG 3
-01SJ	SMA	JACK	50μ" GOLD	PASSIVATED	PRF01-J-C-EP-142-SS (3294)	SHT 3, FIG 4
-01BJ	SMA	JACK	50μ" GOLD	PASSIVATED	PRF01-J-C-EP-142-BS (3297)	SHT 4, FIG 5
-01RP	SMA	PLUG	50μ" GOLD	PASSIVATED	PRF01-P-C-EP-142-RS (3283)	SHT 4, FIG 6
-04SP	TNCA	PLUG	50μ" GOLD	PASSIVATED	PRF04-P-C-EP-142-SS (3246)	SHT 5, FIG 7
-04RP	TNCA	PLUG	50μ" GOLD	PASSIVATED	PRF04-P-C-EP-142-RS (3369)	SHT 5, FIG 8
-04BJ	TNCA	JACK	50μ" GOLD	PASSIVATED	PRF04-J-C-EP-142-BS (3281)	SHT 6, FIG 9
-06SP	NTPE	PLUG	50μ" GOLD	PASSIVATED	PRF06-P-C-EP-142-SS (3177)	SHT 6, FIG 10
-06RP	NTPE	PLUG	50μ" GOLD	PASSIVATED	PRF06-P-C-EP-142-RS (3375)	SHT 7, FIG 11
-06BJ	NTPE	JACK	50μ" GOLD	PASSIVATED	PRF06-J-C-EP-142-BS (3282)	SHT 7, FIG 12
**SING	SINGLE ENDED	-	-	-	-	-
**XXXXXX	STRIPPED & TINNED	-	-	-	-	SHT 1, FIG 2

**= END 2 OPTION ONLY

TABLE 3

END OPTION	MAXIMUM RETURN LOSS (PER END)	MAXIMUM VSWR (PER END)	MAXIMUM INSERTION LOSS (IL) (PER END)	FREQUENCY	PROTECTIVE CAP COLOR
-01SP	22.51	1.162	.03+.03*SQRT(Freq)	DC TO 18 GHz	BROWN
-01SJ	22.51	1.162	.03+.03*SQRT(Freq)	DC TO 18 GHz	BROWN
-01BJ	22.51	1.162	.03+.03*SQRT(Freq)	DC TO 18 GHz	BROWN
-01RP	20.67	1.204	.03+.055*SQRT(Freq)	DC TO 18 GHz	BROWN
-04SP	22.51	1.162	.03+.03*SQRT(Freq)	DC TO 18 GHz	RED
-04RP	20.67	1.204	.03+.04*SQRT(Freq)	DC TO 18 GHz	RED
-04BJ	22.51	1.162	.03+.03*SQRT(Freq)	DC TO 18 GHz	RED
-06SP	22.51	1.162	.03+.03*SQRT(Freq)	DC TO 18 GHz	BLACK
-06RP	20.67	1.204	.03+.045*SQRT(Freq)	DC TO 18 GHz	BLACK
-06BJ	22.51	1.162	.03+.04*SQRT(Freq)	DC TO 18 GHz	BLACK

IL Max [dB] for Cable Assembly :

$$= \{8.036 * \text{SQRT}(\text{Freq}[\text{GHz}]) + 0.196 * \text{Freq}[\text{GHz}]\} * \text{OAL}[\text{mm}] / 30480 + \text{End Option IL\#1(See Table 3)} + \text{End Option IL\#2(See Table 3)}$$

VSWR MAX FOR CABLE ASSEMBLY:

= END OPTION VSWR#1(SEE TABLE 3)*END OPTION VSWR#2(SEE TABLE 3)

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BY: HENSON T 10/13/2020 SHEET 2 OF 7

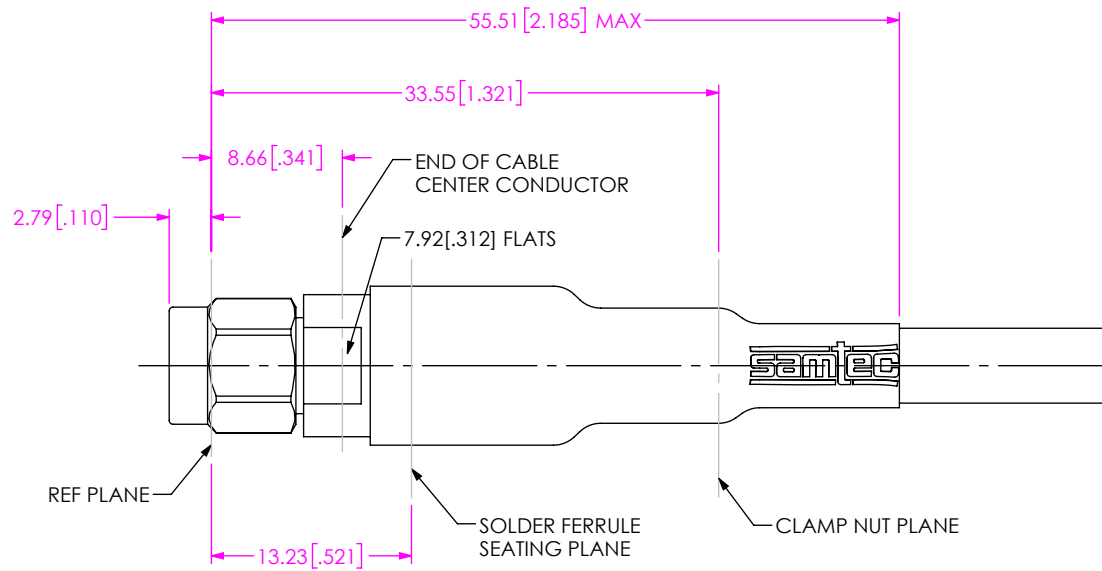


FIG 3
-01SP SHOWN
(PROTECTIVE CAP NOT SHOWN FOR CLARITY)

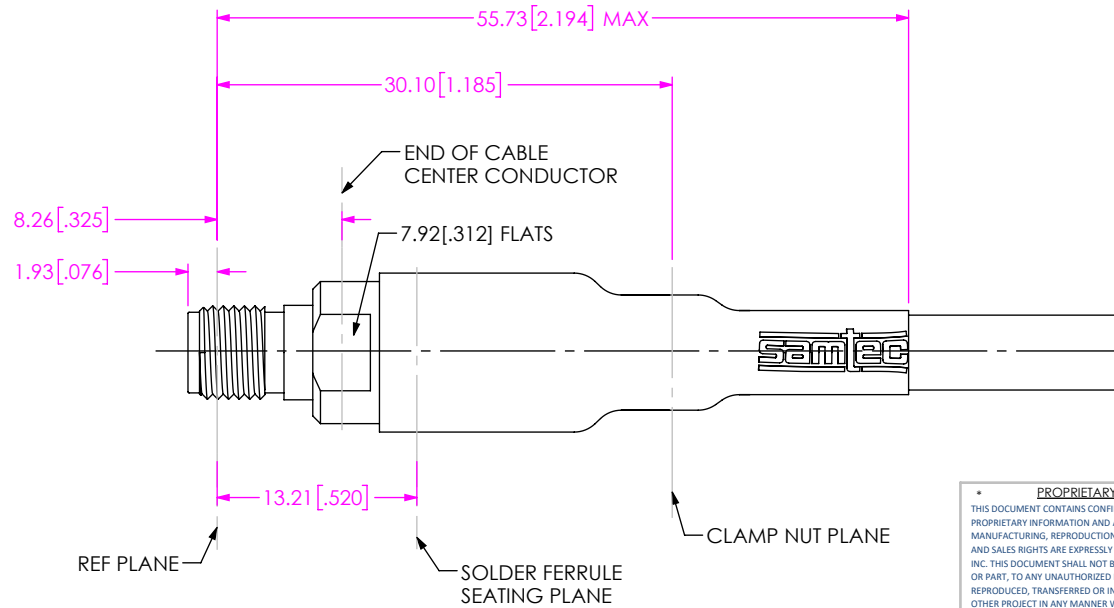


FIG 4
-01SJ SHOWN
(PROTECTIVE CAP NOT SHOWN FOR CLARITY)

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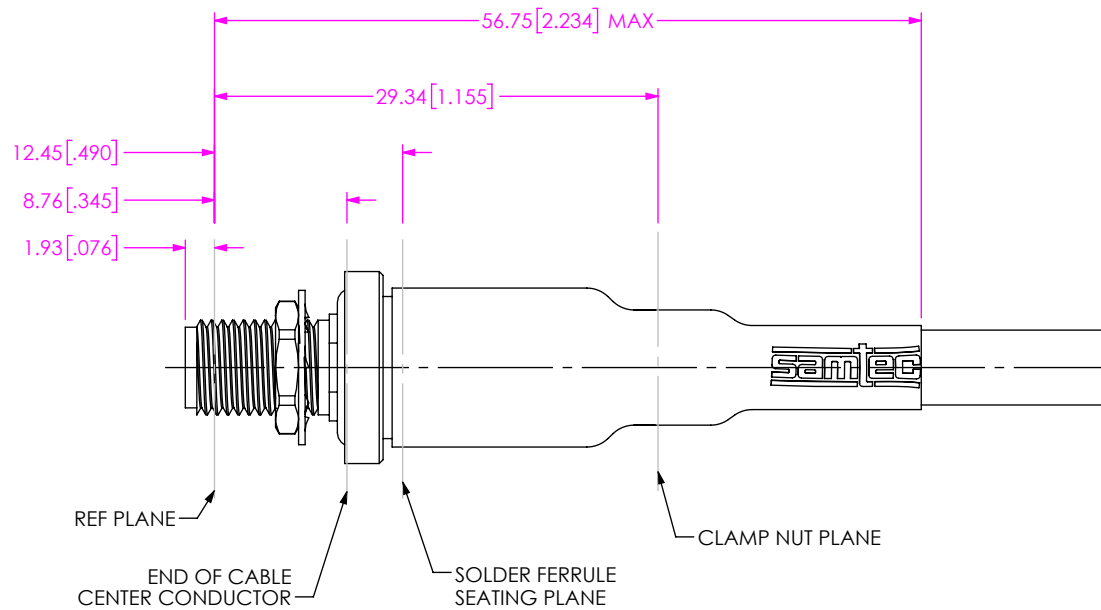


FIG 5
-01BJ SHOWN
(PROTECTIVE CAP NOT SHOWN FOR CLARITY)

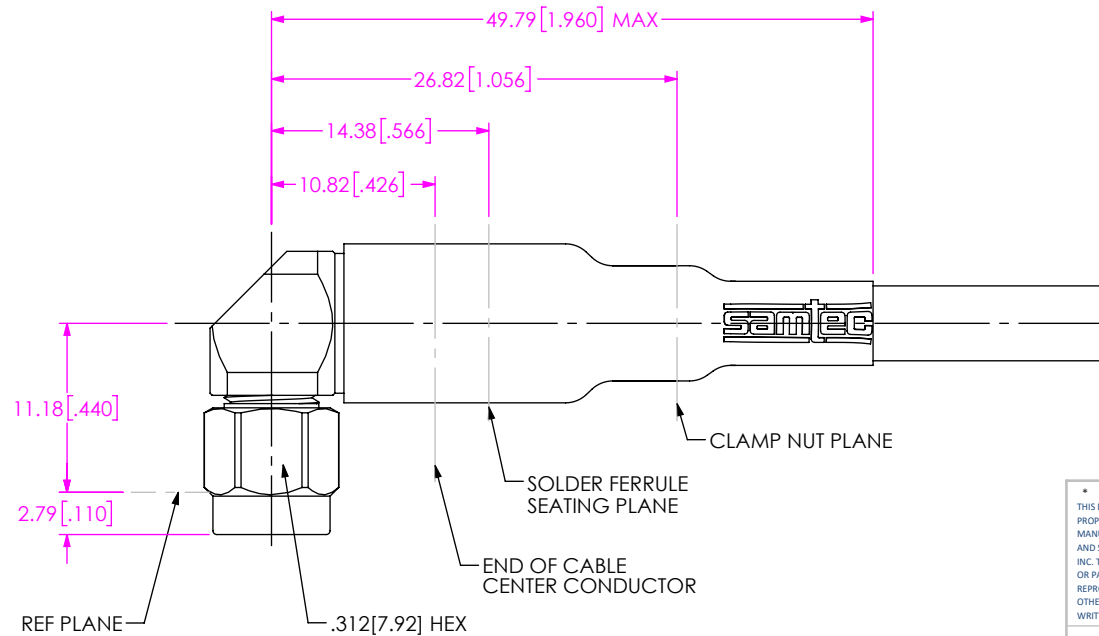


FIG 6
-01RP SHOWN
(PROTECTIVE CAP NOT SHOWN FOR CLARITY)

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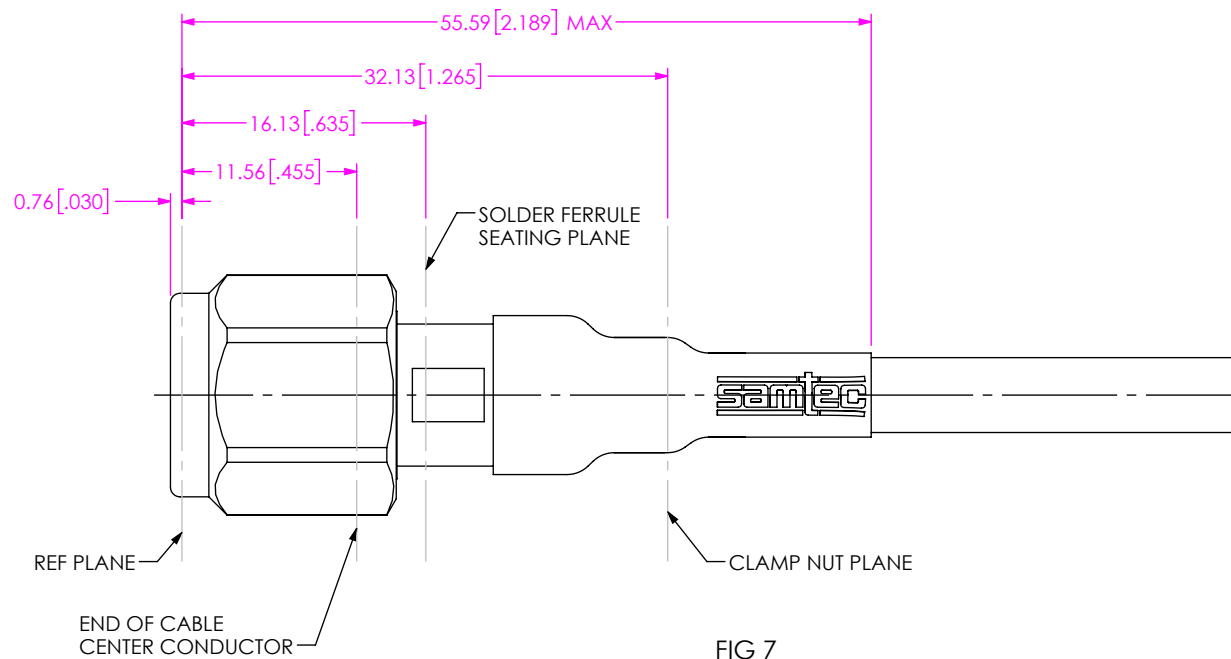


FIG 7
-04SP SHOWN
(PROTECTIVE CAP NOT SHOWN FOR CLARITY)

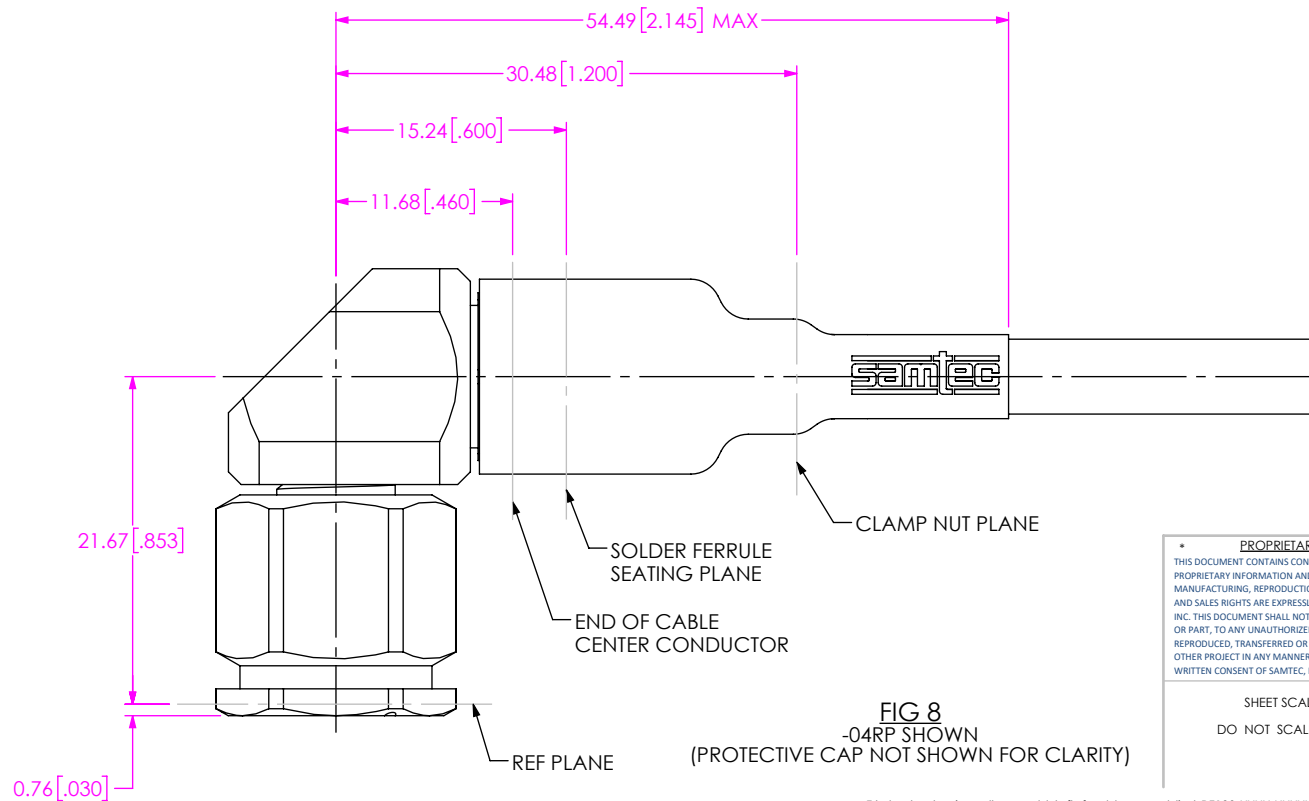


FIG 8
-04RP SHOWN
(PROTECTIVE CAP NOT SHOWN FOR CLARITY)

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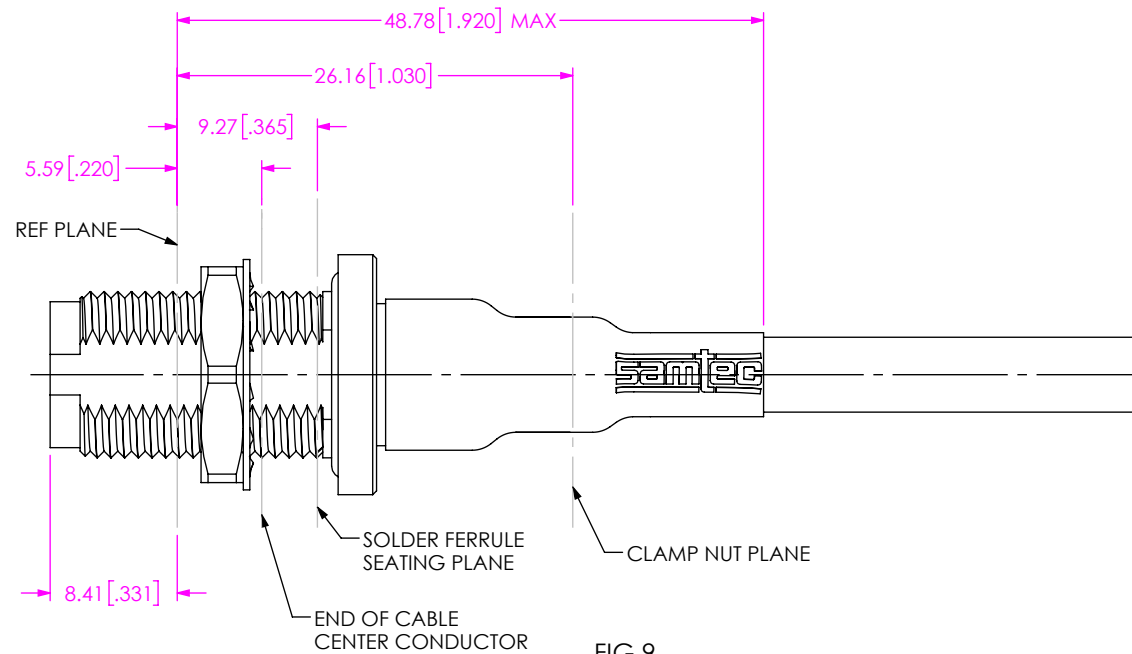


FIG 9
-04BJ SHOWN
(PROTECTIVE CAP NOT SHOWN FOR CLARITY)

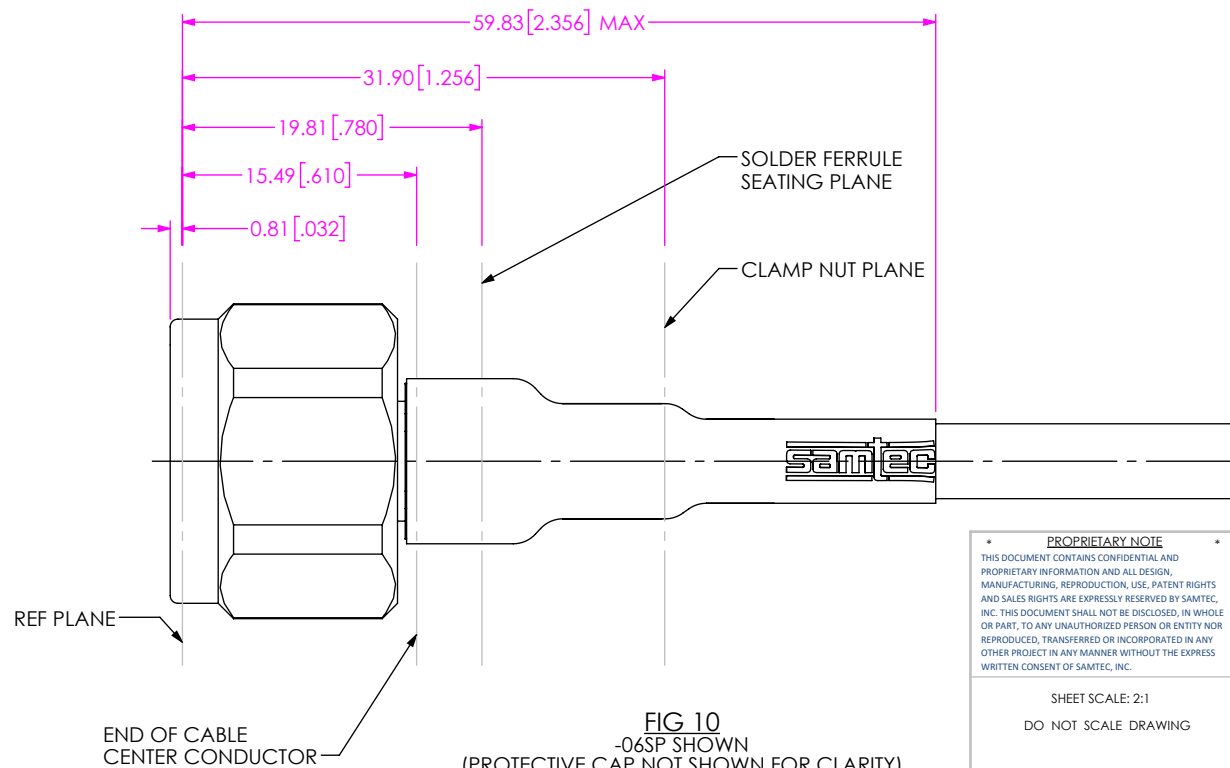


FIG 10
-06SP SHOWN
(PROTECTIVE CAP NOT SHOWN FOR CLARITY)

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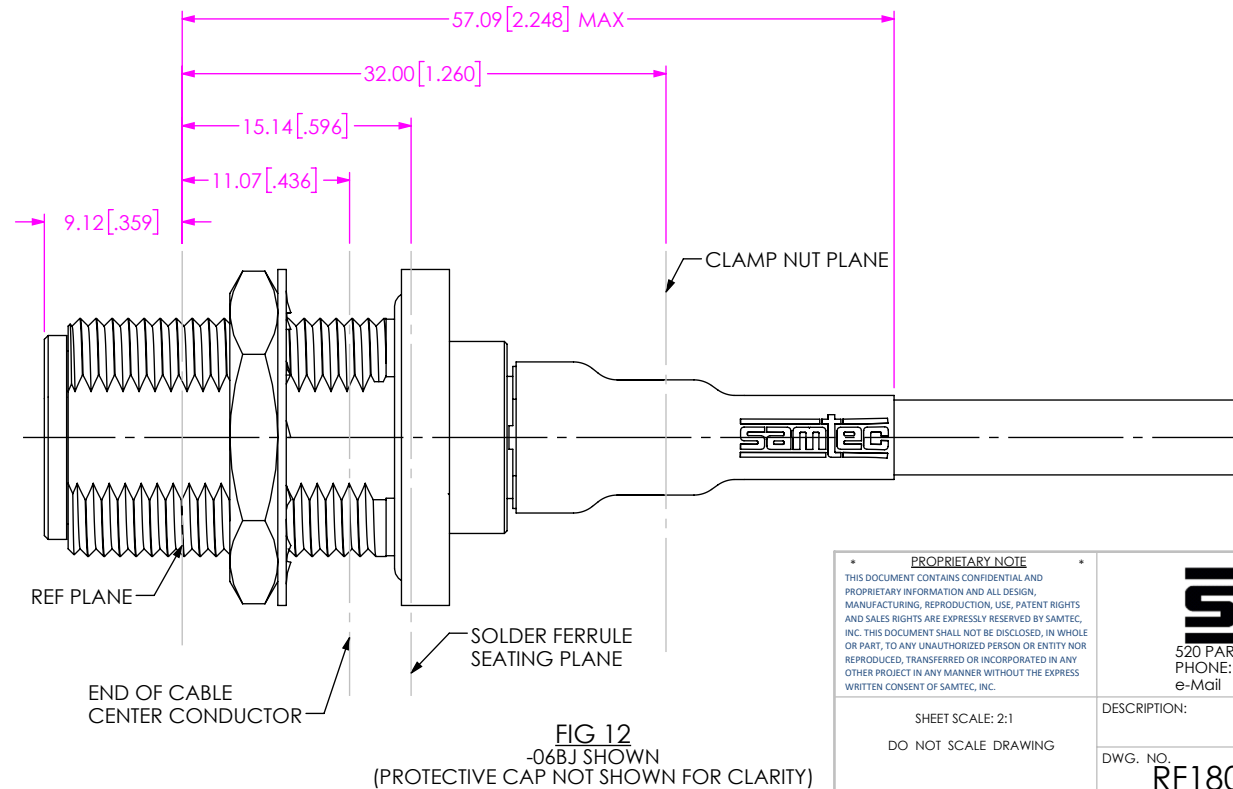
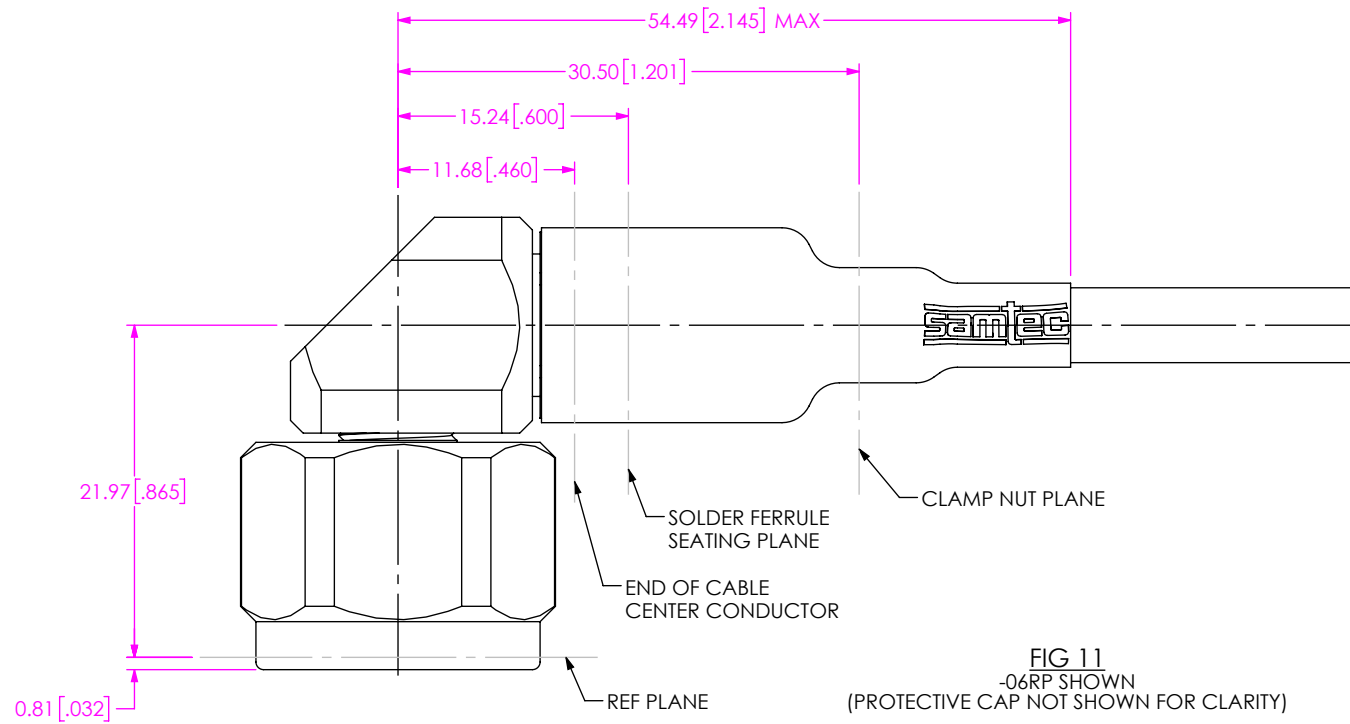
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