

DO NOT
SCALE FROM
THIS PRINT

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

THIS PRODUCT MANUFACTURED
WITH LEAD-FREE PROCESSING

RF280-XXXX-XXXXXX-XXXX

CABLE CALLOUT
280: CCA-280-MPTFE

END 1 CONNECTOR
(SEE TABLE 2, SHT 2)

OVERALL ASSEMBLY LENGTH (OAL)
XXXX (MILLIMETERS)
(0200 MIN)

END 2 CONNECTOR
(SEE TABLE 2, SHT 2)

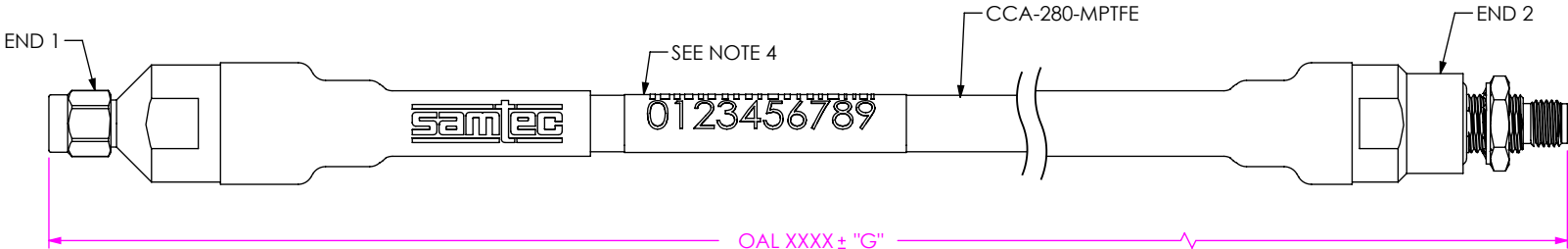


FIG 1
RF280-01SP-01BJ-XXXX SHOWN
(PROTECTIVE CAPS NOT SHOWN FOR CLARITY)

TABLE 1	
OVERALL LENGTH	"G"
0200-0300 [7.87-11.81]	+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]

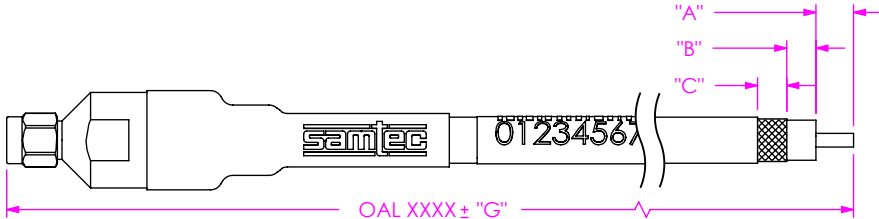


FIG 2
RF280-01SP-203038-XXXX SHOWN (SEE NOTE 6 & 7)

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

DO NOT LEAVE ANY SPACE BLANK
EACH MUST CONTAIN A
NUMERIC CHARACTER 0 THRU 9

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.

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

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SHEET SCALE: 1:1

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

DESCRIPTION:
RF280 CABLE ASSEMBLY

DWG. NO.
RF280-XXXX-XXXXXX-XXXX

BY: EVE L 04/12/2021 SHEET 1 OF 6

TABLE 2

END OPTION	SERIES	GENDER	FINISH		FIGURE
			CENTER CONTACT	OUTER CONTACT	
-01SP	SMA	PLUG	50μ" GOLD	PASSIVATED	SHT 3, FIG 3
-01RP	SMA	PLUG	50μ" GOLD	PASSIVATED	SHT 3, FIG 4
-01BJ	SMA	JACK	50μ" GOLD	PASSIVATED	SHT 4, FIG 5
-04SP	TNCA	PLUG	50μ" GOLD	PASSIVATED	SHT 6, FIG 9
-04BJ	TNCA	JACK	50μ" GOLD	PASSIVATED	SHT 6, FIG 10
-06SP	NTPE	PLUG	50μ" GOLD	PASSIVATED	SHT 4, FIG 6
-06RP	NTPE	PLUG	50μ" GOLD	PASSIVATED	SHT 5, FIG 7
-06BJ	NTPE	JACK	50μ" GOLD	PASSIVATED	SHT 5, FIG 8
**SING	SINGLE ENDED	-	-	-	-
**XXXXX	STRIPPED & TINNED	-	-	-	SHT 1, FIG 2

**= END 2 OPTION ONLY

TABLE 3

END OPTION	MAXIMUM RETURN LOSS (PER END)	MAXIMUM VSWR (PER END)	MAXIMUM ONE CONNECTOR LOSS (IL) (dB)	FREQUENCY	PROTECTIVE CAP COLOR
-01SP	-22.51 dB	1.162	$0.03+0.03*\text{SQRT}(\text{Freq}[\text{GHz}])$	DC TO 18 GHz	BROWN
-01RP	-22.51 dB	1.162	$0.04+0.06*\text{SQRT}(\text{Freq}[\text{GHz}])$	DC TO 14 GHz	BROWN
	-20.67 dB	1.204		14 GHz TO 18 GHz	
-01BJ	-22.51 dB	1.162	$0.03+0.03*\text{SQRT}(\text{Freq}[\text{GHz}])$	DC TO 18 GHz	BROWN
-04SP	-22.51 dB	1.162	$0.03+0.03*\text{SQRT}(\text{Freq}[\text{GHz}])$	DC TO 18 GHz	RED
-04BJ	-22.51 dB	1.162	$0.03+0.03*\text{SQRT}(\text{Freq}[\text{GHz}])$	DC TO 18 GHz	RED
-06SP	-22.51 dB	1.162	$0.03+0.03*\text{SQRT}(\text{Freq}[\text{GHz}])$	DC TO 18 GHz	BLACK
-06RP	-22.51 dB	1.162	$0.04+0.06*\text{SQRT}(\text{Freq}[\text{GHz}])$	DC TO 14 GHz	BLACK
	-19.90 dB	1.225		14 GHz TO 18 GHz	
-06BJ	-22.51 dB	1.162	$0.03+0.03*\text{SQRT}(\text{Freq}[\text{GHz}])$	DC TO 18 GHz	BLACK

IL Max [dB] for Cable Assembly :

$$= \{4.905 * \text{SQRT}(\text{Freq}[\text{GHz}]) + 0.184 * \text{Freq}[\text{GHz}]\} * \text{OAL}[\text{mm}] / 30480 + \text{End Option IL\#1} \{ \text{See Table 3} \} + \text{End Option IL\#2} \{ \text{See Table 3} \}$$

VSWR Max for Cable Assembly :

$$= \text{VSWR End Option \#1} \{ \text{See Table 3} \} * \text{VSWR End Option \#2} \{ \text{See Table 3} \}$$

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DESCRIPTION:
 RF280 CABLE ASSEMBLY

DWG. NO.
 RF280-XXXX-XXXXXX-XXXX

BY: EVE L 04/12/2021 SHEET 2 OF 6

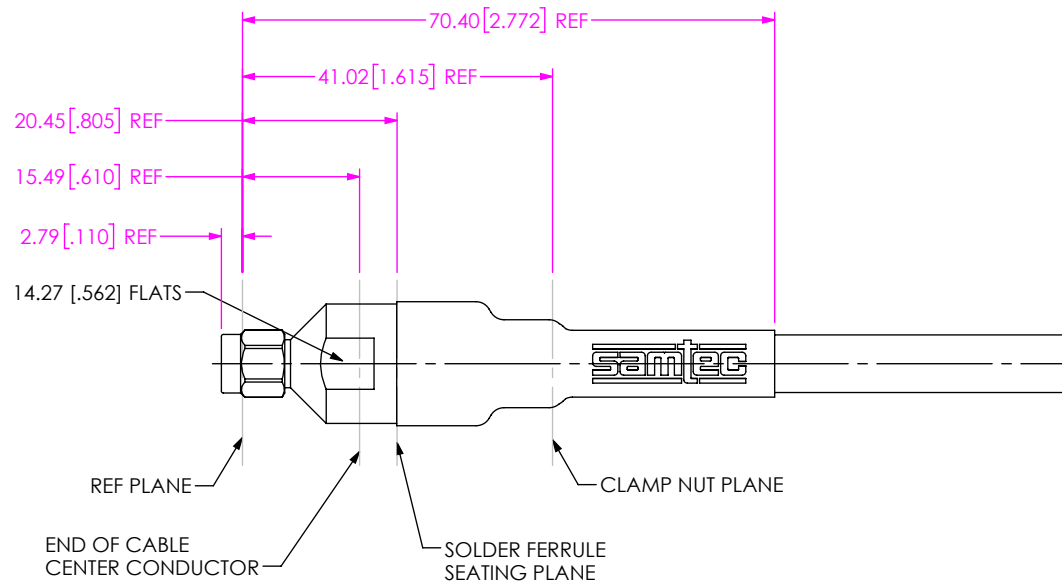


FIG 3
-01SP SHOWN
(PROTECTIVE CAP NOT SHOWN FOR CLARITY)

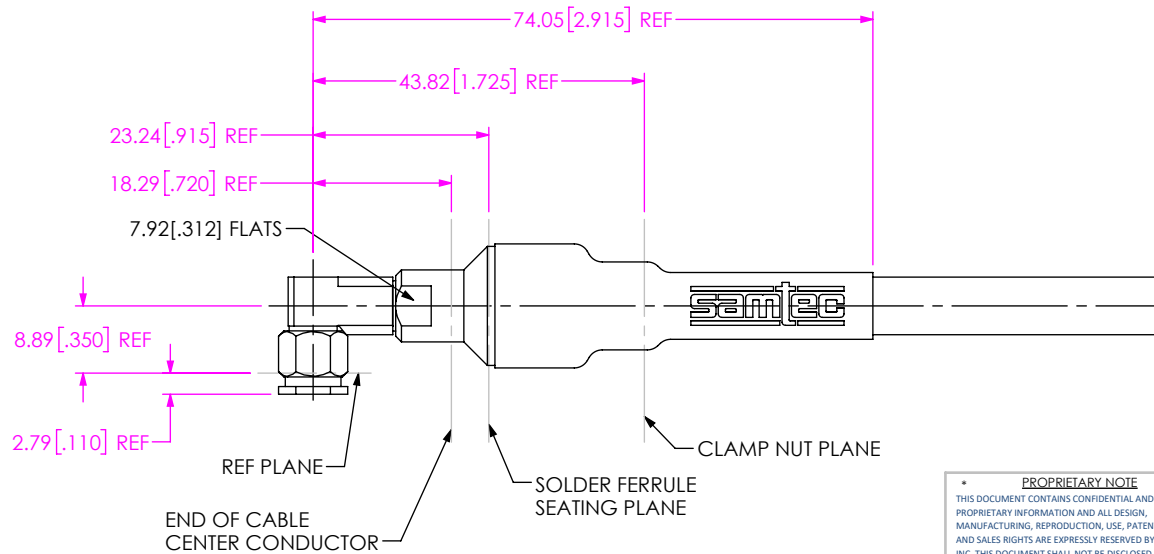


FIG 4
-01RP SHOWN
(PROTECTIVE CAP NOT SHOWN FOR CLARITY)

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DWG. NO. RF280-XXXX-XXXXXX-XXXX

BY: EVE L 04/12/2021 SHEET 3 OF 6

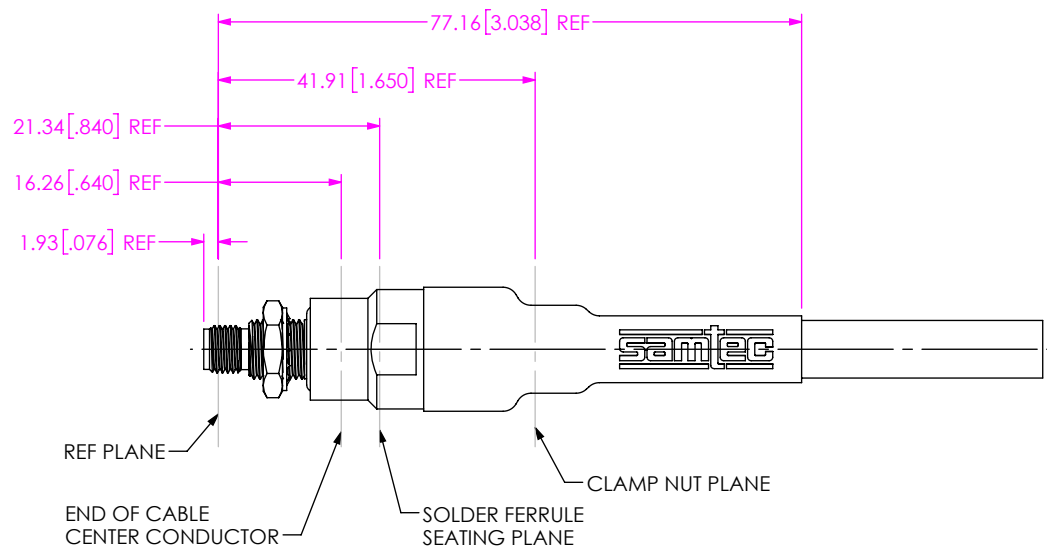


FIG 5
-01BJ SHOWN
(PROTECTIVE CAP NOT SHOWN FOR CLARITY)

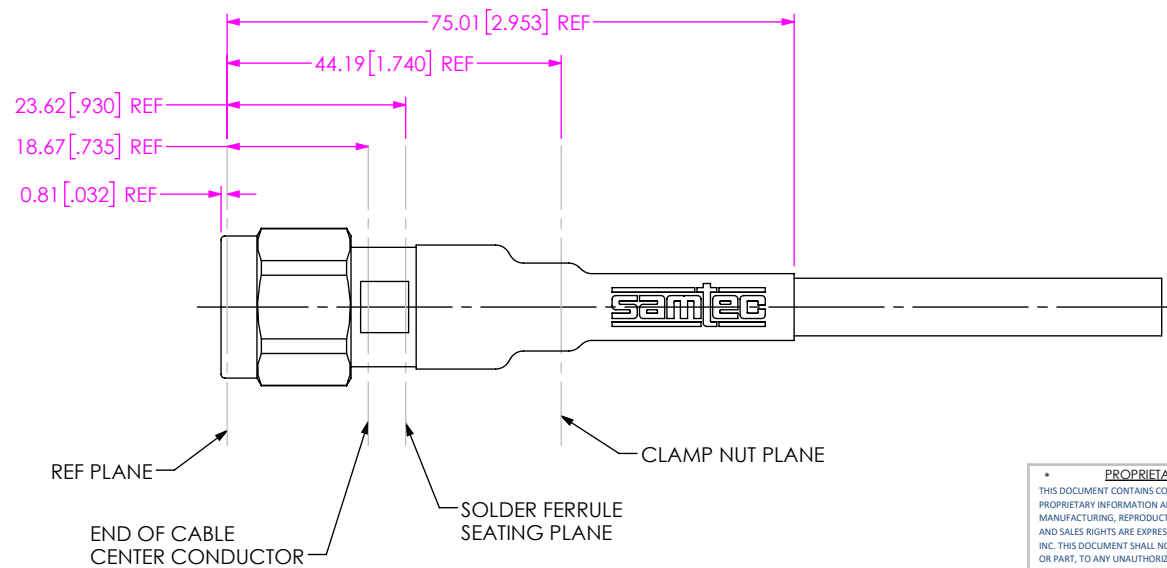


FIG 6
-06SP SHOWN
(PROTECTIVE CAP NOT SHOWN FOR CLARITY)

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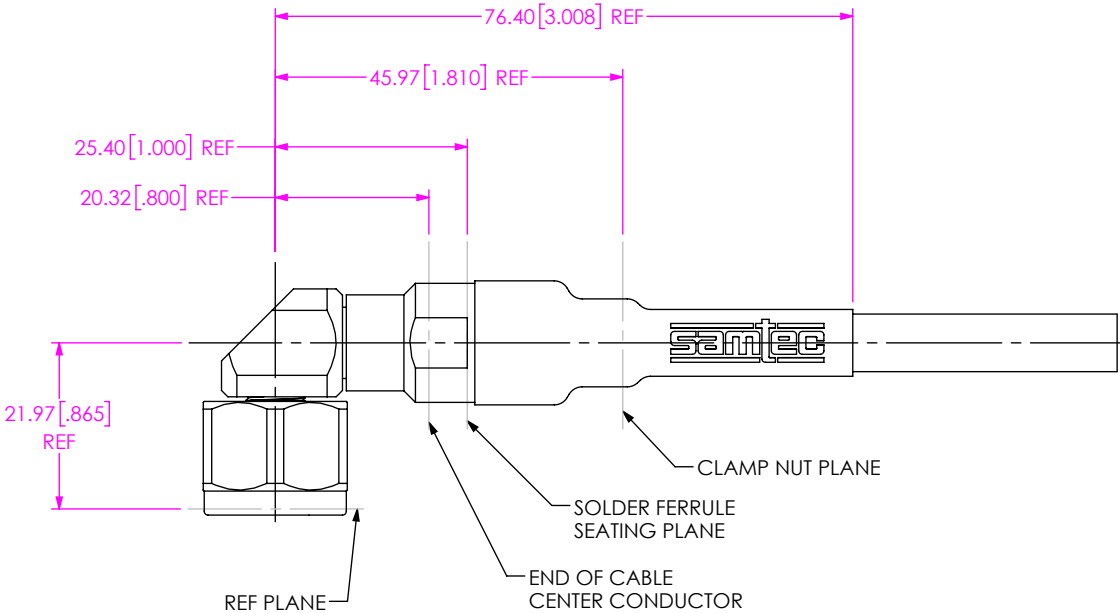


FIG 7
-06RP SHOWN
(PROTECTIVE CAP NOT SHOWN FOR CLARITY)

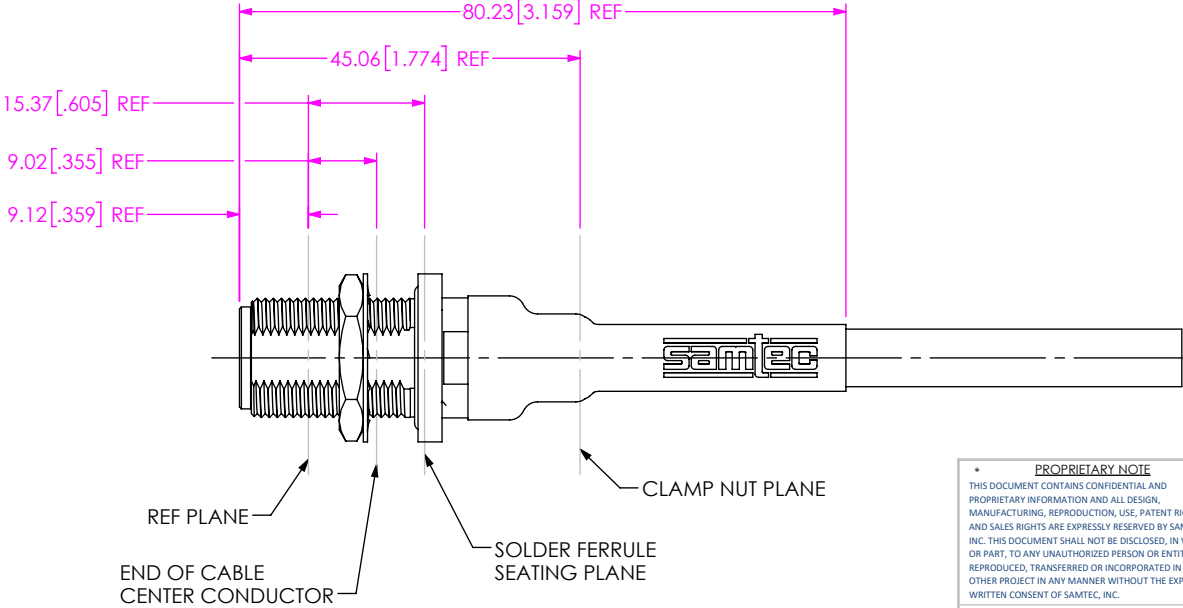


FIG 8
-06BJ SHOWN
(PROTECTIVE CAP NOT SHOWN FOR CLARITY)

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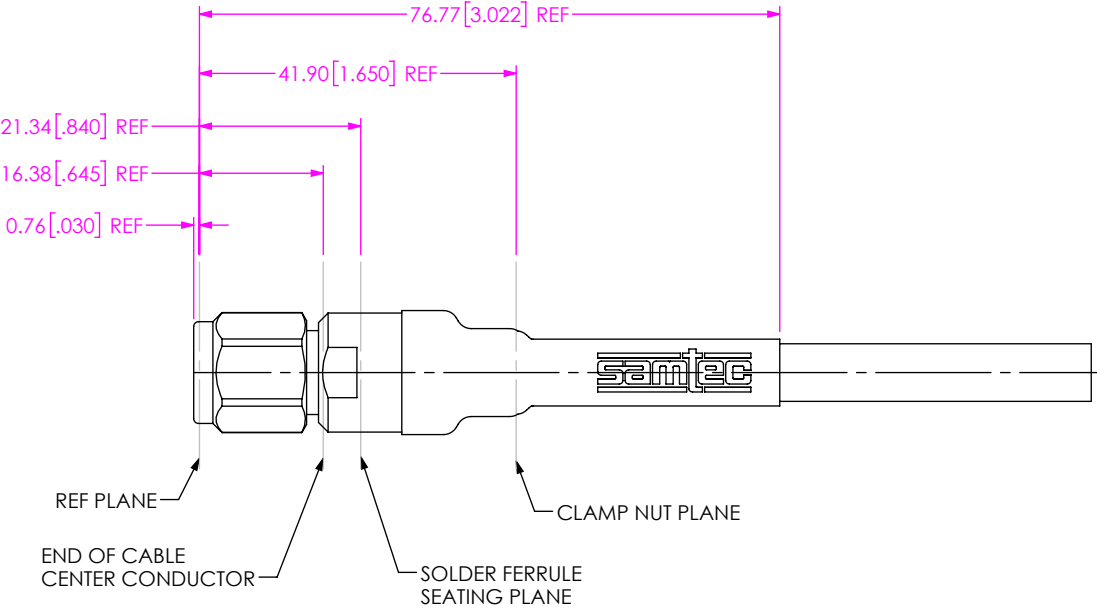


FIG 9
-04SP SHOWN
(PROTECTIVE CAP NOT SHOWN FOR CLARITY)

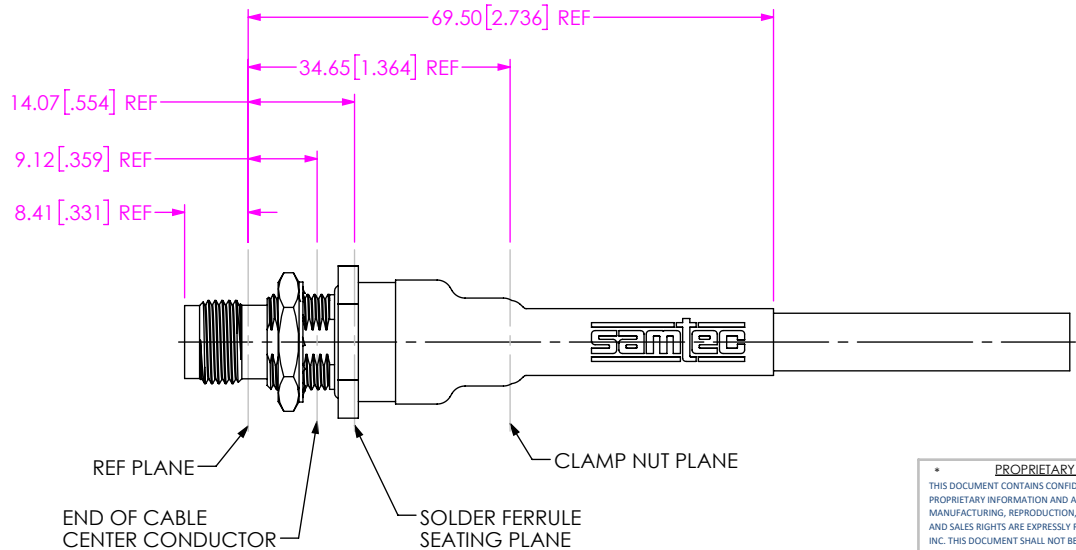


FIG 10
-04BJ SHOWN
(PROTECTIVE CAP NOT SHOWN FOR CLARITY)

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