

DO NOT
SCALE FROM
THIS PRINT THIS PRODUCT MANUFACTURED
WITH LEAD-FREE PROCESSING

LL071-XXXX-XXXXXX-XXXX-X-XX

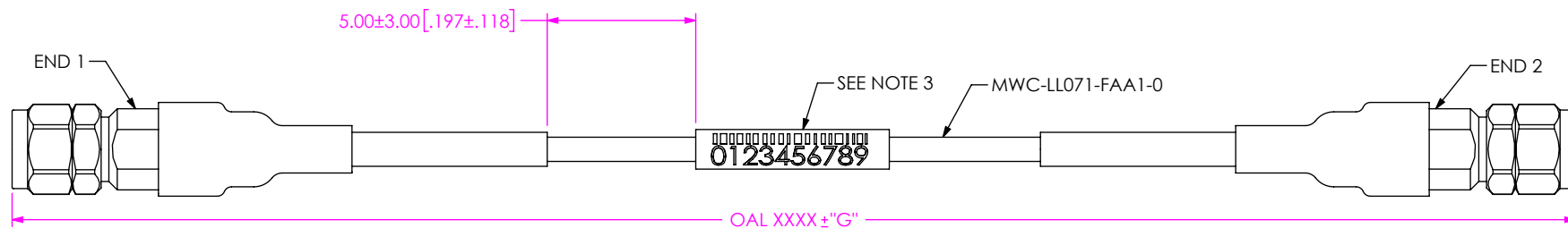
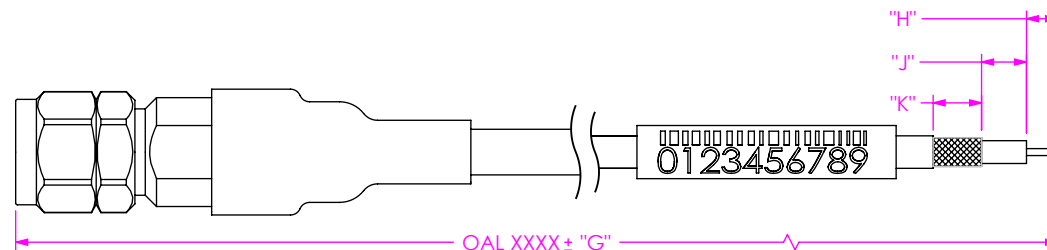
CABLE CALLOUT
LL071: LL071 CABLEEND 1 CONNECTOR
(SEE TABLE 2, SHT 2)END 2 CONNECTOR
(SEE TABLE 2, SHT 2)OVERALL ASSEMBLY LENGTH (OAL)
XXXX (MILLIMETERS)
(0100 MIN)
(SEE NOTE 7)NO. OF PHASE MATCHING CABLES
-XX: (XX CABLE FOR THIS PART NUMBER)
(XX CAN BE 02 TO 16)
-BLANK: 1 CABLE FOR THIS PART NUMBER,
ONLY AVAILABLE WITH NO
PHASE MATCHING OPTIONPHASE MATCHING SPEC (RANGE)
-1: 1 PICO-SECOND
-2: 2 PICO-SECONDS
-5: 5 PICO-SECONDS
-BLANK: NO PHASE MATCHINGFIG 1
LL071-18SP-18SP-XXXX SHOWN
(PROTECTIVE CAPS NOT SHOWN FOR CLARITY)

TABLE 1	
OVERALL LENGTH	"G"
0100-0300 [3.94-11.81]	+5.0 [.20] / -0.0 [.00]
0301-1500 [11.85-59.06]	+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
LL071-18SP-102030-XXXX SHOWN (SEE NOTE 5 & 6)"K" FORMAT: X.X
"J" FORMAT: X.X
"H" FORMAT: X.XDO 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.
- CABLE ASSEMBLY TO HAVE PROTECTIVE CAPS ASSEMBLED ON EACH END AND 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.
- CABLE LENGTHS LONGER THAN 1000 MILLIMETERS ARE NOT SUPPORTED BY S.I. TEST DATA.
- DIM "H", "J", AND "K" HAVE A MINIMUM VALUE OF 0.0mm & A MAXIMUM VALUE OF 9.9mm [.39"].
- FOR STRIPPED AND TINNED OPTION, BOTH THE CENTER CONDUCTOR IS TINNED.
- USE 3 DIGITS XXX (MILLIMETERS) FOR PHASE MATCHING OPTION. 999MM MAX LENGTH.

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WRITTEN CONSENT OF SAMTEC, INC.MATERIAL:
CENTER CONTACTS: COPPER ALLOY
DO NOT SCALE DRAWING
SHEET SCALE: 3:1OUT CONTACTS:
-18SP / -18BJ / -92SP: STAINLESS STEELINSULATORS:
-18SP / -18BJ / -92SP: ULTEM**samtec**520 PARK EAST BLVD, NEW ALBANY, IN 47150
PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail: info@SAMTEC.com code 55322DESCRIPTION:
LL071 CABLE ASSEMBLYDWG. NO.
LL071-XXXX-XXXXXX-XXXX-X-XX

BY: MATT M. 9/4/2024 SHEET 1 OF 4

TABLE 2

END OPTION	SERIES	GENDER	FINISH			CONNECTOR KIT P/N	FIGURE
			CENTER CONTACT	OUTER CONTACT	SOLDER FERRULE		
-18SP	1.85 MM	PLUG	50μ" GOLD	PASSIVATED	50μ" GOLD	PRF18-P-C-EP-071B-SS-2	SHT 3, FIG 3
-18BJ	1.85 MM	JACK	50μ" GOLD	PASSIVATED	50μ" GOLD	PRF18-J-C-EP-071B-BS	SHT 3, FIG 4
*-92SP	2.92 mm	PLUG	50μ" GOLD	PASSIVATED	30μ" GOLD	PRF-92-P-C-EP-071B-SS	SHT 4, FIG 5
**SING	SINGLE ENDED	-	-	-	-	-	-
**XXXXX	STRIPPED & TINNED	-	-	-	-	-	SHT 1, FIG 2

** = END 2 OPTION ONLY

* = NOT RELEASED

TABLE 3

END OPTION	MAXIMUM RETURN LOSS (PER END)	MAXIMUM VSWR (PER END)	MAXIMUM INSERTION LOSS (IL) (PER END)	FREQUENCY	PROTECTIVE CAP COLOR
-18SP	21.53	1.183	$.03+.03*\text{SQRT}(\text{Freq}[\text{GHz}])$	DC TO 71 GHz	BLUE
-18BJ	21.53	1.183	$.03+.035*\text{SQRT}(\text{Freq}[\text{GHz}])$	DC TO 71 GHz	BLUE
-92SP	22.51	1.162	$.03+.03\text{SQRT}(\text{Freq}[\text{GHz}])$	DC - 26.5 GHz	YELLOW
	21.53	1.183		26.5 - 43.5 GHz**	

IL Max [dB] for cable assembly:

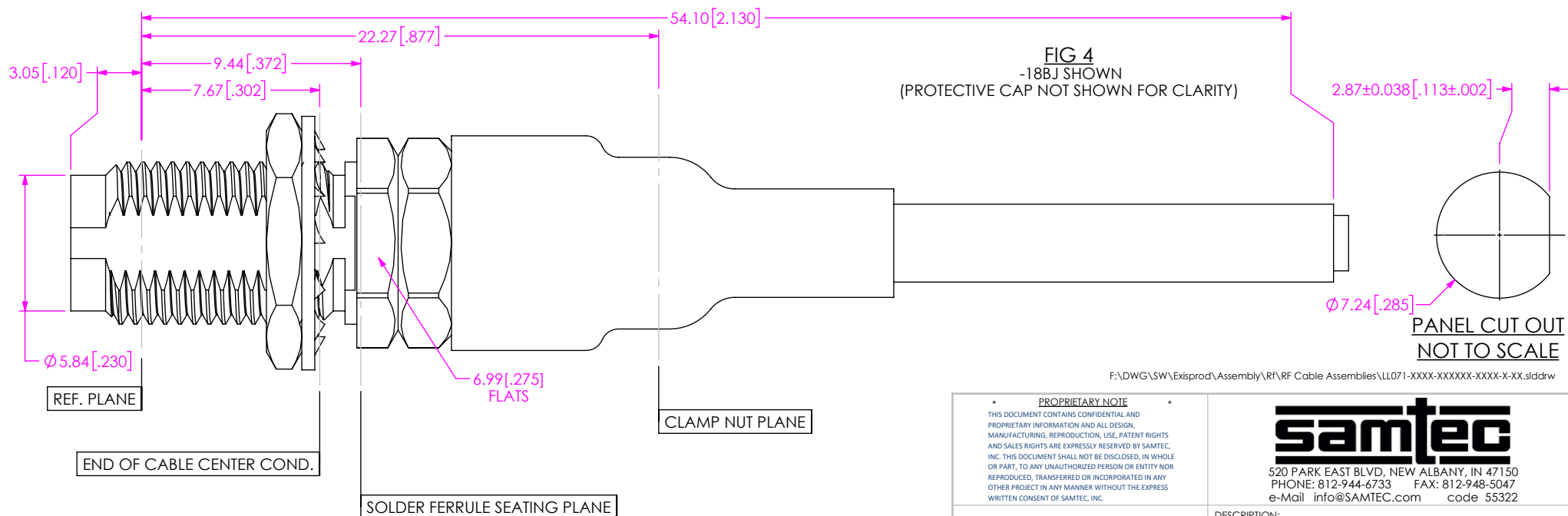
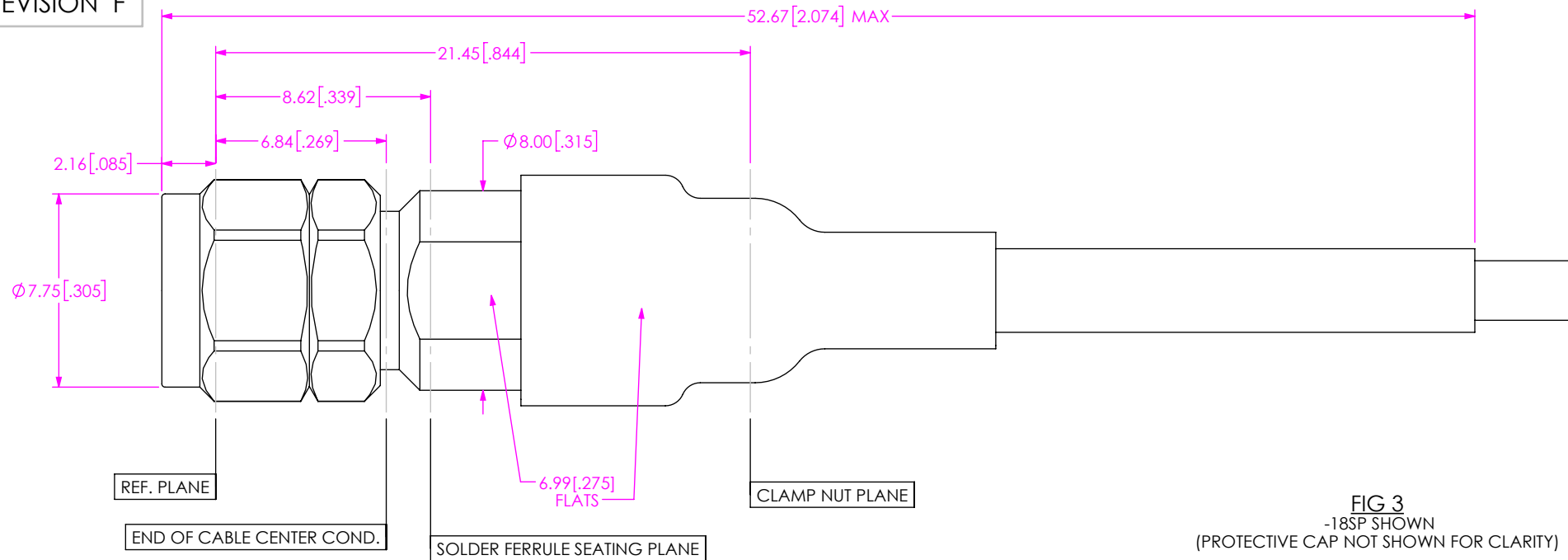
$$= \{19.8167*\text{SQRT}(\text{Freq}[\text{GHz}])+0.2771*\text{Freq}[\text{GHz}]+0.000000172*\text{Freq}[\text{GHz}]^4\}*\text{OAL}[\text{mm}]/30480+\text{End Option IL\#1}\{\text{See Table 3}\}+\text{End Option IL\#2}\{\text{See Table 3}\}$$

* = NOT RELEASED

**=PRODUCTION TESTING TO 40GHz

F:\DWG\SW\Exisprod\Assembly\RF\Cable Assemblies\LL071-XXXX-XXXXX-XXXX-X-XX.slddrw

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	<p>DO NOT SCALE DRAWING</p> <p>SHEET SCALE: 4:1</p>	
	<p>DESCRIPTION: LL071 CABLE ASSEMBLY</p>	
	<p>DWG. NO. LL071-XXXX-XXXXXX-XXXX-X-XX</p> <p>BY: MATT M. 9/4/2024 SHEET 2 OF 4</p>	



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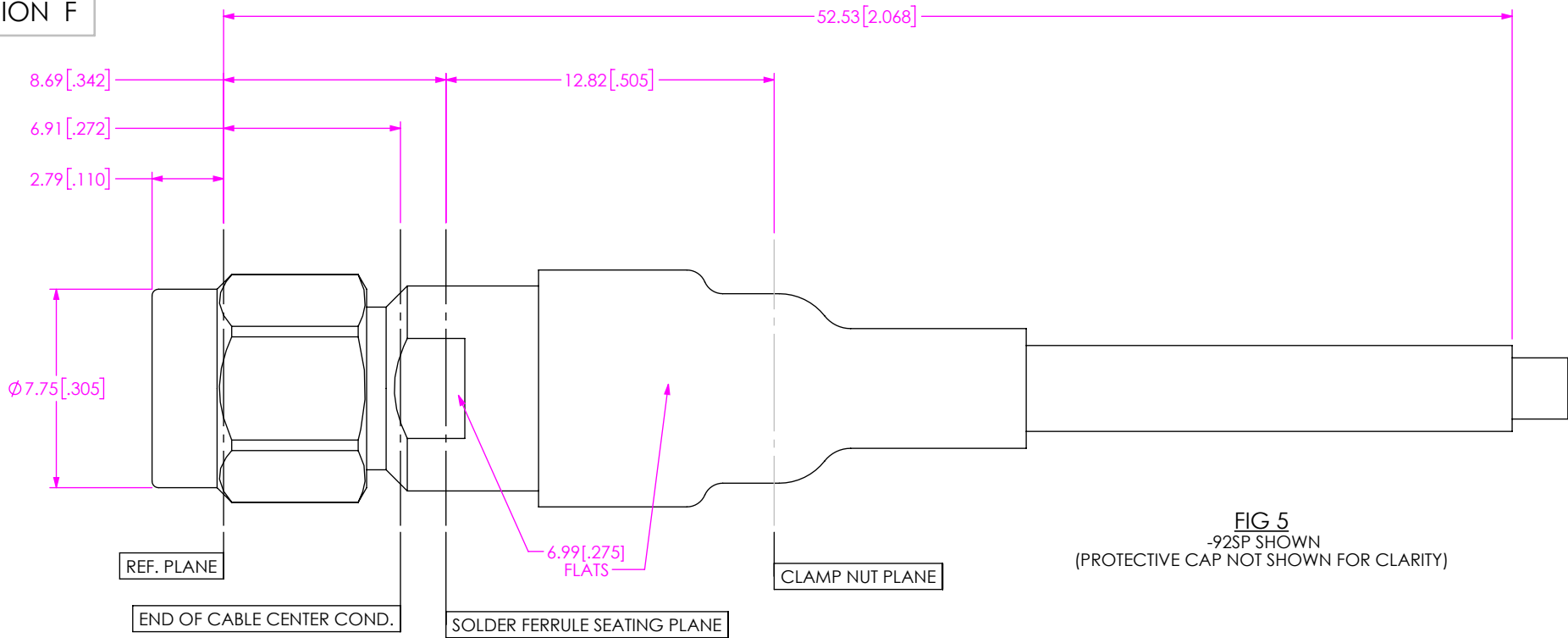



FIG 5
-92SP SHOWN
(PROTECTIVE CAP NOT SHOWN FOR CLARITY)

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