

DO NOT

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THIS PRINT

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

P6) THIS PRODUCT MANUFACTURED WITH LEAD-FREE PROCESSING

## 

CABLE CALLOUT LL071: LL071 CABLE

> END 1 CONNECTOR (SEE TABLE 2, SHT 2)

**END 2 CONNECTOR** (SEE TABLE 2, SHT 2)

(SEE NOTÉ 7)

OVERALL ASSEMBLY LENGTH (OAL) XXXX (MILLIMETERS) (0100 MIN)

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 OPTION

PHASE MATCHING SPEC (RANGE)
-1: 1 PICO-SECOND

-2: 2 PICO-SECONDS

-5: 5 PICO-SECONDS -BLANK: NO PHASE MATCHING

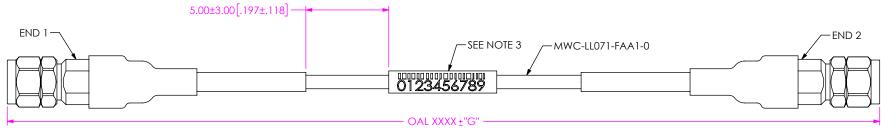


FIG 1 LL071-18SP-18SP-XXXX SHOWN (PROTECTIVE CAPS NOT SHOWN FOR CLARITY)

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]					

# OAL XXXX± "G" FIG 2 LL071-18SP-102030-XXXX SHOWN (SEE NOTE 5 & 6) "K" FORMAT: X.X "J" FORMAT: X.X "H" FORMAT: X.X DO NOT LEAVE ANY SPACE BLANK, EACH MUST CONTAIN A NUMERIC CHARACTER 0 THRU 9

#### NOTES:

- 1. CONNECTORS TO BE ORIENTED ACCORDING TO CO-RF-WI-3048-M.
- 2. CABLE ASSEMBLY TO HAVE PROTECTIVE CAPS ASSEMBLED ON EACH END AND INDIVIDUALLY PACKAGED IN ESD BAG.
- 3. 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.
- 4. CABLE LENGTHS LONGER THAN 1000 MILLIMETERS ARE NOT SUPPORTED BY S.I. TEST DATA.
- 5. DIM "H", "J", AND "K" HAVE A MINIMUM VALUE OF 0.0mm & A MAXIMUM VALUE OF 9.9mm[.39"].

  6. FOR STRIPPED AND TINNED OPTION, BOTH THE CENTER CONDUCTOR IS TINNED.
- 7. USE 3 DIGITS XXX (MILLIMETERS) FOR PHASE MATCHING OPTION. 999MM MAX LENGTH.

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DO NOT SCALE DRAWING DESCRIPTION MATERIAL: CENTER CONTACTS: COPPER ALLOY SHEET SCALE: 3:1

OUT CONTACTS: -18SP/ -18BJ/ -92SP: STAINLESS STEEL

INSULATORS: -18SP/ -18BJ/ -92SP: ULTEM

LL071 CABLE ASSEMBLY

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

F:\DWG\SW\Exisprod\Assembly\Rf\RF Cable Assemblies\LL071-XXXX-XXXXXX-XXXXX-XXX.slddrw

## REVISION D

TABLE 2								
END OPTION	SERIES GE	0.5110.50	FINISH					
		GENDER	CENTER CONTACT	OUTER CONTACT	SOLDER FERRULE	CONNECTOR KIT P/N	FIGURE	
-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	-	-	-	-	-	-	
**-XXXXXX	STRIPPED & TINNED	-	-	-	-	-	SHT 1, FIG 2	

<sup>\*\* =</sup> 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			
-18SP	21.53	1.183	.03+.03*SQRT(Freq[GHz])	DC TO 71 GHz	BLUE			
* -18BJ	21.53	1.183	.03+.03*SQRT(Freq[GHz])	DC TO 71 GHz	BLUE			
*-92SP	22.51	1.162	.03+.03*SQRT(Freq[GHz])	DC - 26.5 GHz	YELLOW			
	21.53	1.183	1.001.00 Oditi(i loq[Oli2])	26.5 - 43.5 GHz**	,			

IL Max [dB] for cable assembly:

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

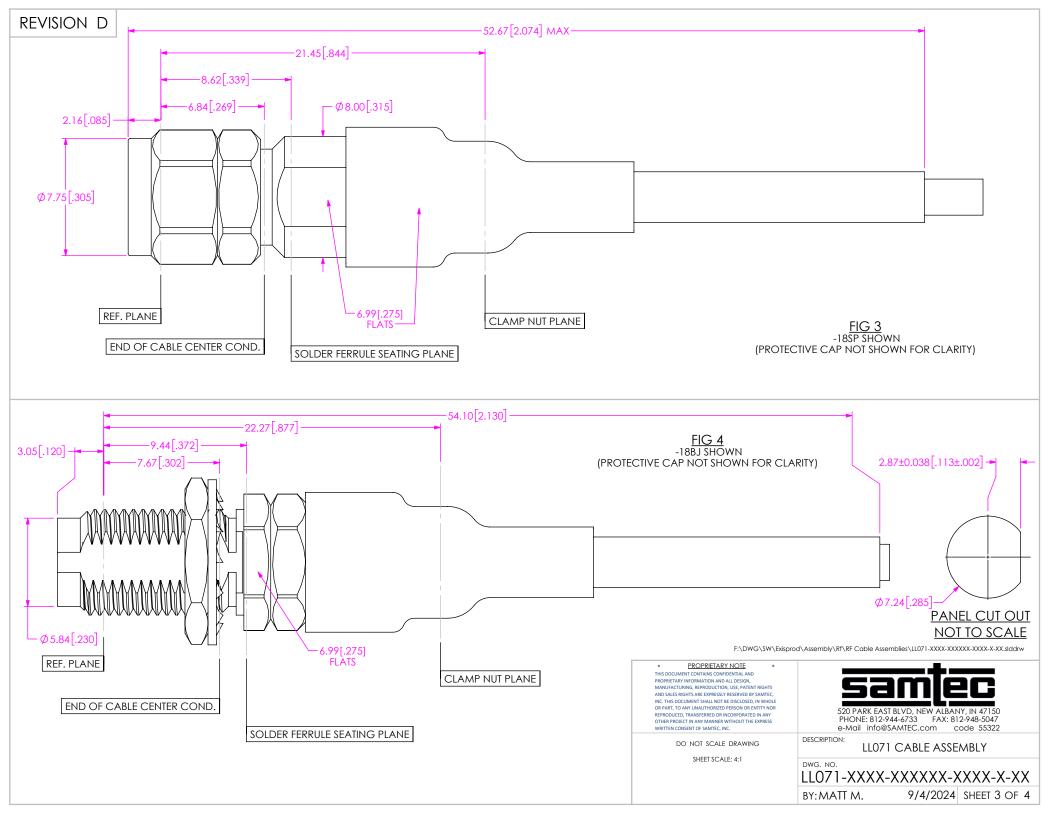
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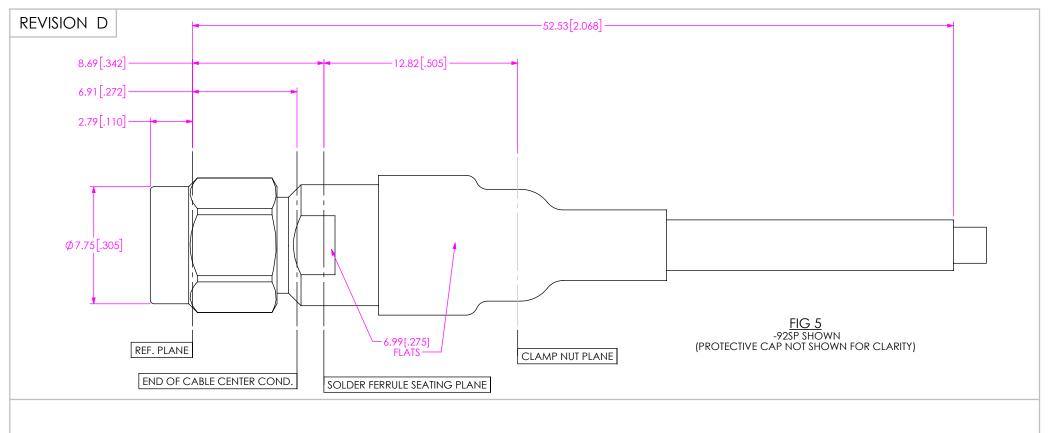


<sup>\* =</sup> NOT RELEASED

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<sup>\*\*=</sup>PRODUCTION TESTING TO 40GHz





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DESCRIPTION:

LL071 CABLE ASSEMBLY

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

SHEET SCALE: 4:1