

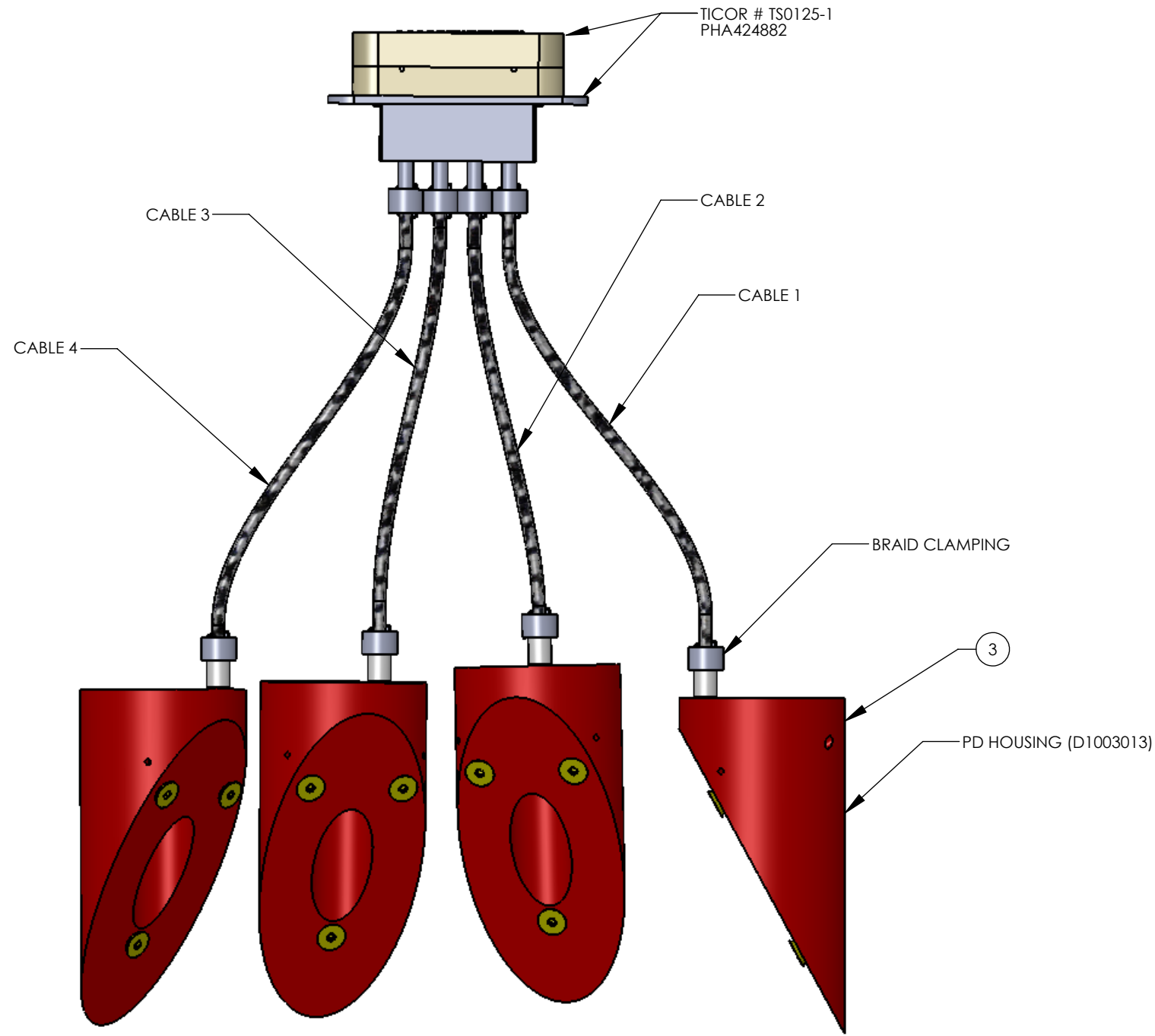
NOTES: (UNLESS OTHERWISE SPECIFIED)

- 1. MATERIAL:
 - a. CONNECTOR SHELL - PEEK VICTREX GRADE TDS-450G.
 - b. BACKSHELL - STAINLESS STEEL WITH VENT HOLE.
 - c. CONTACTS - BERYLLIUM COPPER ALLOY C17300
0.000050 MIN. GOLD OVER NICKEL
 - d. HARDWARE: CORROSION RESISTANCE STEEL, PASSIVATED
 - e. PEEK BRAID - PEEK VICTREX GRADE TDS-450CA30 CARBON LOADED

- 2. CABLE 4 COND. 22 AWG, WITH PFA INSULATION COONER WIRE #CZ2205
OVERALL PEEK BRAID MIN. 50% COVERAGE OVERALL CABLE O.D. WILL BE APPROX. 0.200 IN.

③ INSERT WIRES (ITEM 4) IN PD BACK PEEK (ITEM 7) AND LABEL

REV.	DATE	DCN #	DRAWING TREE #
v1	06 MAR 2011	E1100335	
v2	25 MAY 2011	E1100335	



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN INCHES
 TOLERANCES:
 .XX ± .06
 .XXX ± .010
 ANGULAR ± 1.0°

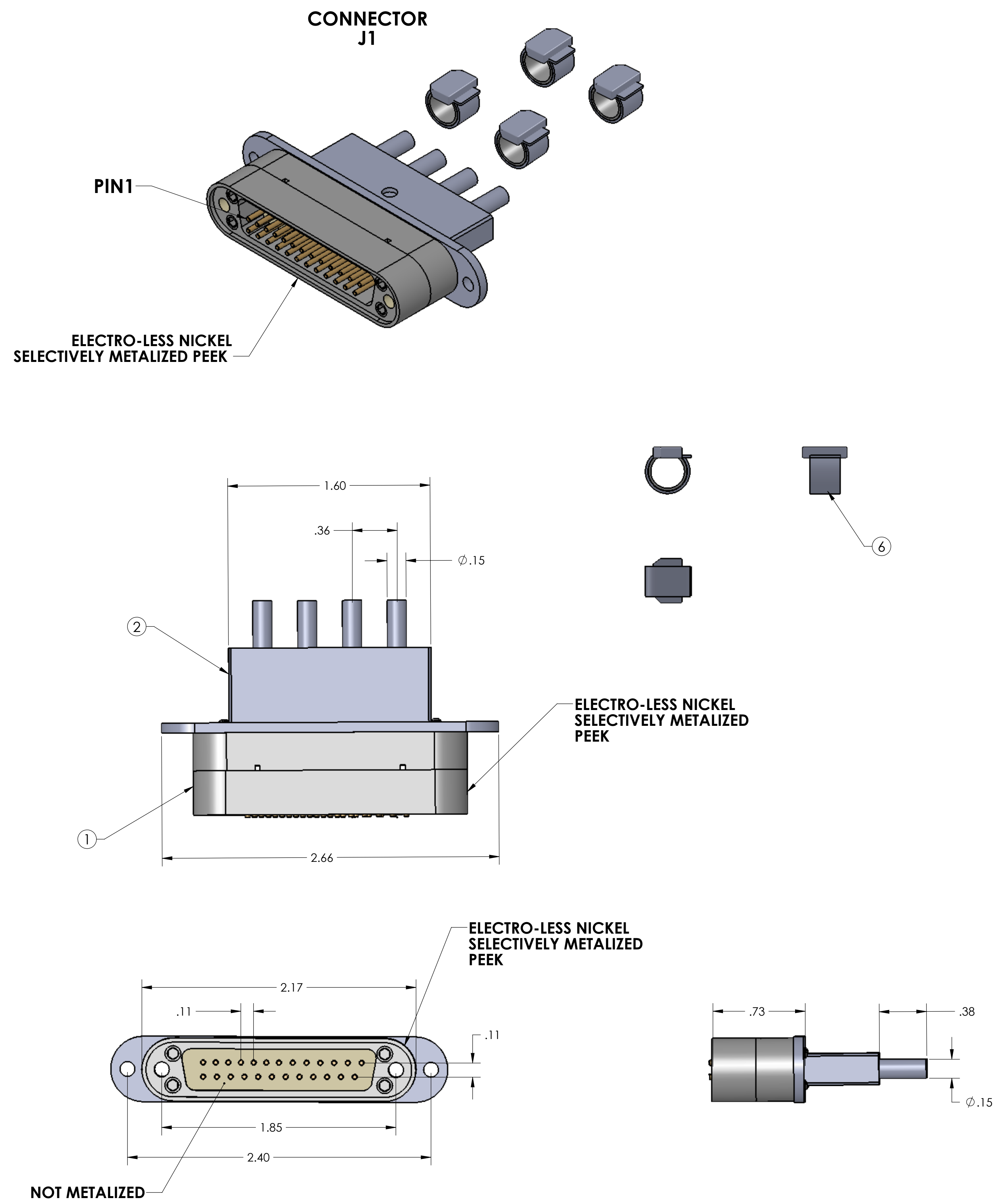
MATERIAL N/A FINISH N/A μinch

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM ADVANCED LIGO SUB-SYSTEM AOS
 NEXT ASSY D0901376

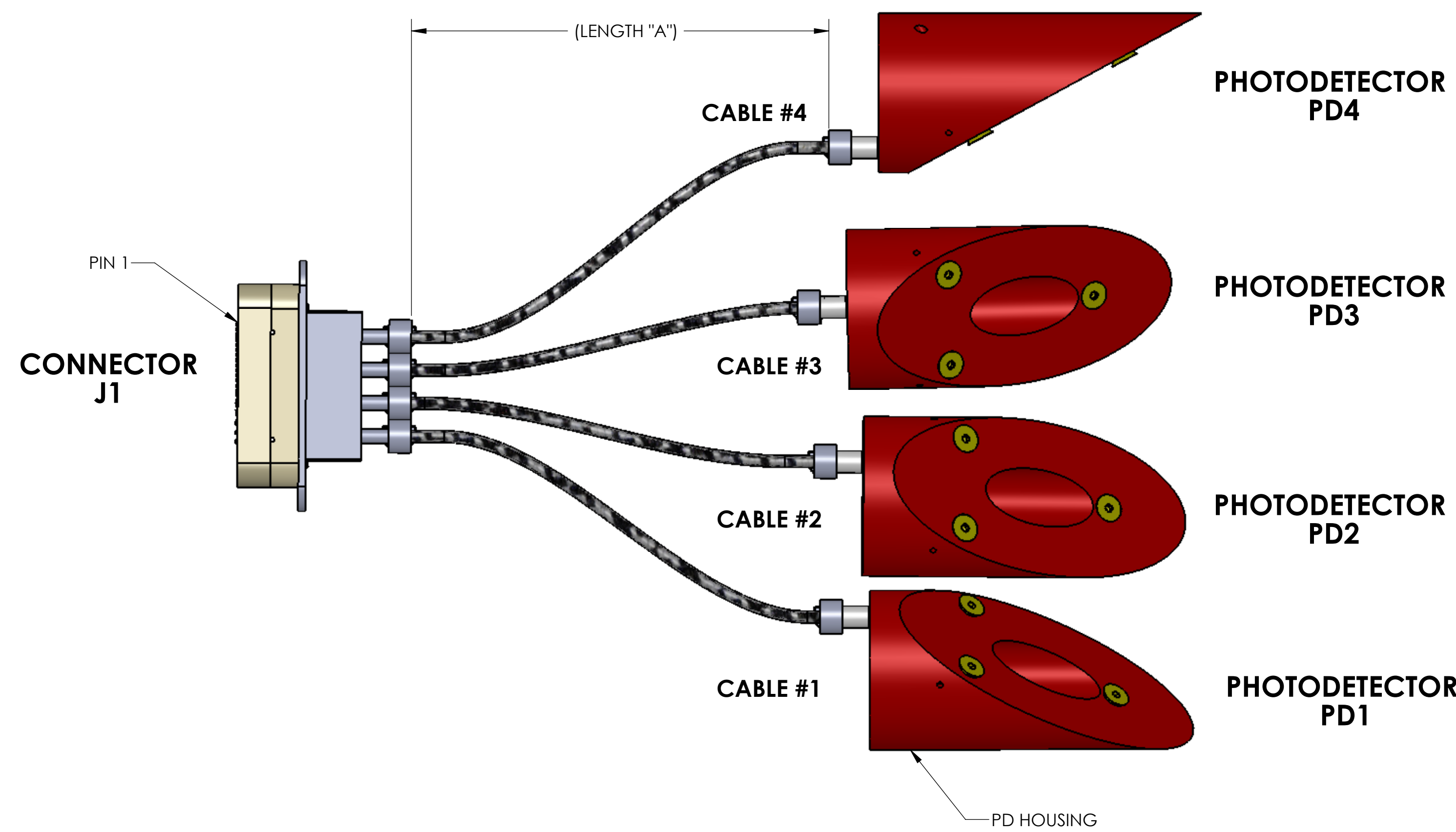
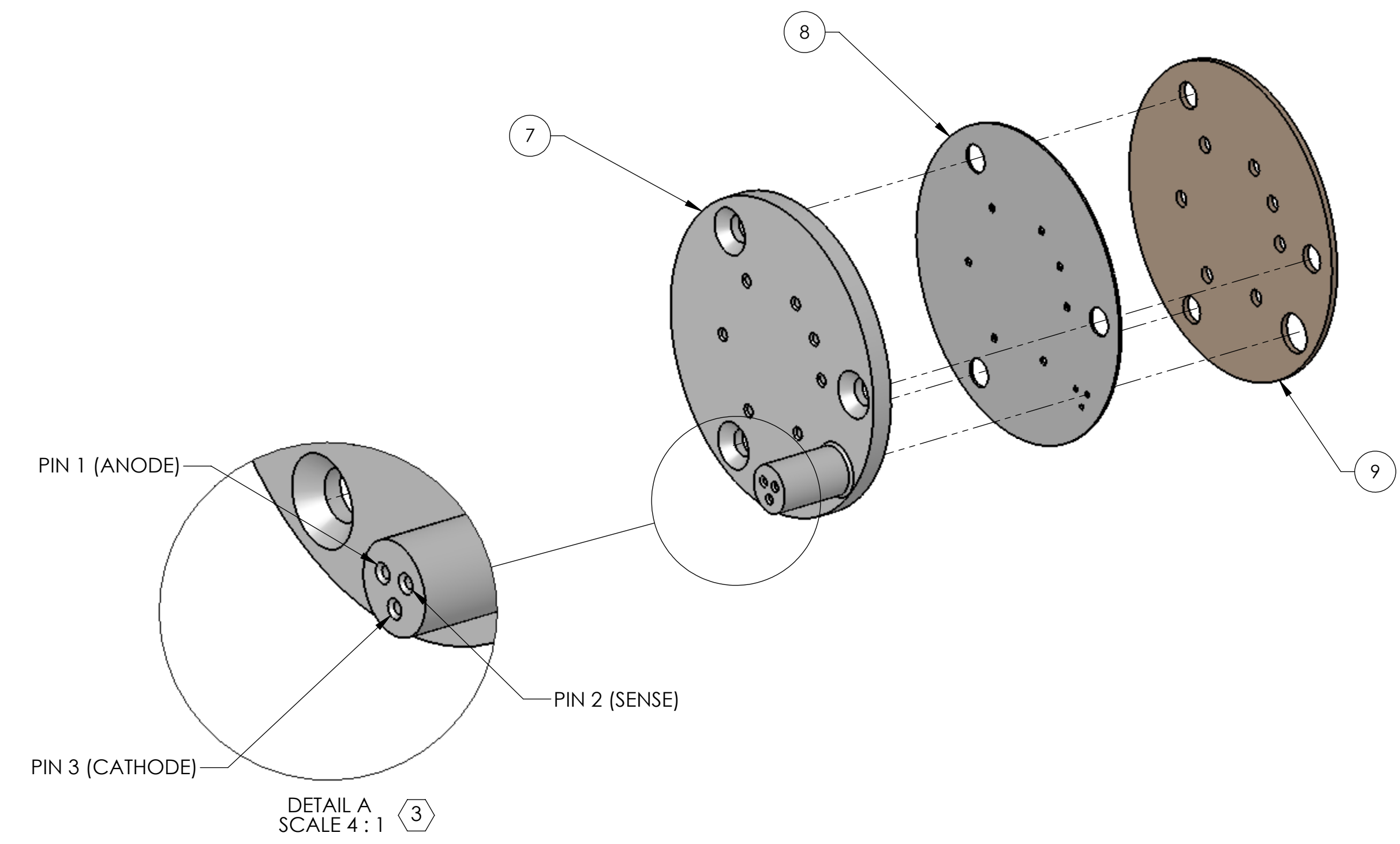
PART NAME SLC PHOTODETECTOR CABLE LOWER ASSY			
DESIGNER	N.Nguyen	02 Dec 2010	SIZE DWG. NO.
DRAFTER	N.Nguyen	04 Dec 2010	B
CHECKER	M. Smith	10 DEC 2010	D1003111
APPROVAL			REV. v2
SCALE: 1:4		PROJECTION:	SHEET 1 OF 2

D1003111_AdlIGO_AOS_SLC Photodetector Cable Lower Assy, PART PDM REV: X-117, DRAWING PDM REV: X-026



V25AC-36 CABLE ASSEMBLY CIRCUIT SUMMARY
V-DB25 M/S1-36-4_MM4PIN F/X

FROM			
CONNECTOR J1 - 25 PIN SUBMINI_D CONNECTOR (PEEK)			
PIN	WIRE NAME	LENGTH "A"	TWISTED PAIR
1, SHELL	SHIELD		
4	CABLE 4 WIRE 4	69"	TP-1
16	CABLE 4 WIRE 16	69"	TP-1
3	CABLE 4 WIRE 3	69"	TP-2
15	NO CONNECT		
7	CABLE 3 WIRE 7	69"	TP-3
19	CABLE 3 WIRE 19	69"	TP-3
6	CABLE 3 WIRE 6	69"	TP-4
18	NO CONNECT		
10	CABLE 2 WIRE 10	58"	TP-5
22	CABLE 2 WIRE 22	58"	TP-5
9	CABLE 2 WIRE 9	58"	TP-6
21	NO CONNECT		
13	CABLE 1 WIRE 13	50"	TP-7
25	CABLE 1 WIRE 25	50"	TP-7
12	CABLE 1 WIRE 12	50"	TP-8
24	NO CONNECT		
OPEN 14,17,20,23,2,5,8,11 N/C (NOT CONNECTED)			



V25AC-36 CABLE #4 ASSEMBLY CIRCUIT SUMMARY

TO		
PHOTODETECTOR PD4		
PIN	WIRE NAME	SIGNAL
SHELL	(SHIELD)	
1	(CABLE 4) WIRE 4	ANODE
2	(CABLE 4) WIRE 16	SENSE
3	(CABLE 4) WIRE 3	CATHODE

V25AC-36 CABLE #3 ASSEMBLY CIRCUIT SUMMARY

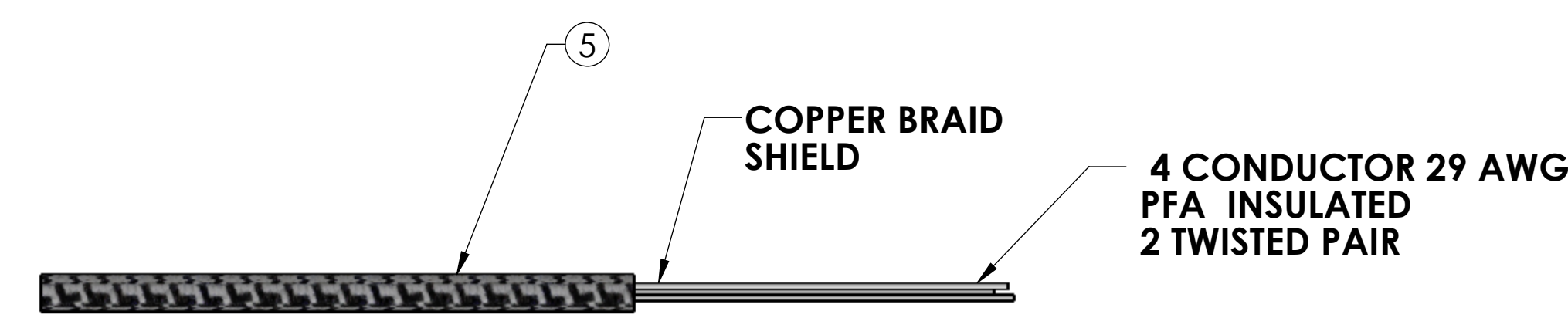
TO		
PHOTODETECTOR PD3		
PIN	WIRE NAME	SIGNAL
SHELL	(SHIELD)	
1	(CABLE 3) WIRE 7	ANODE
2	(CABLE 3) WIRE 19	SENSE
3	(CABLE 3) WIRE 6	CATHODE

V25AC-36 CABLE #2 ASSEMBLY CIRCUIT SUMMARY

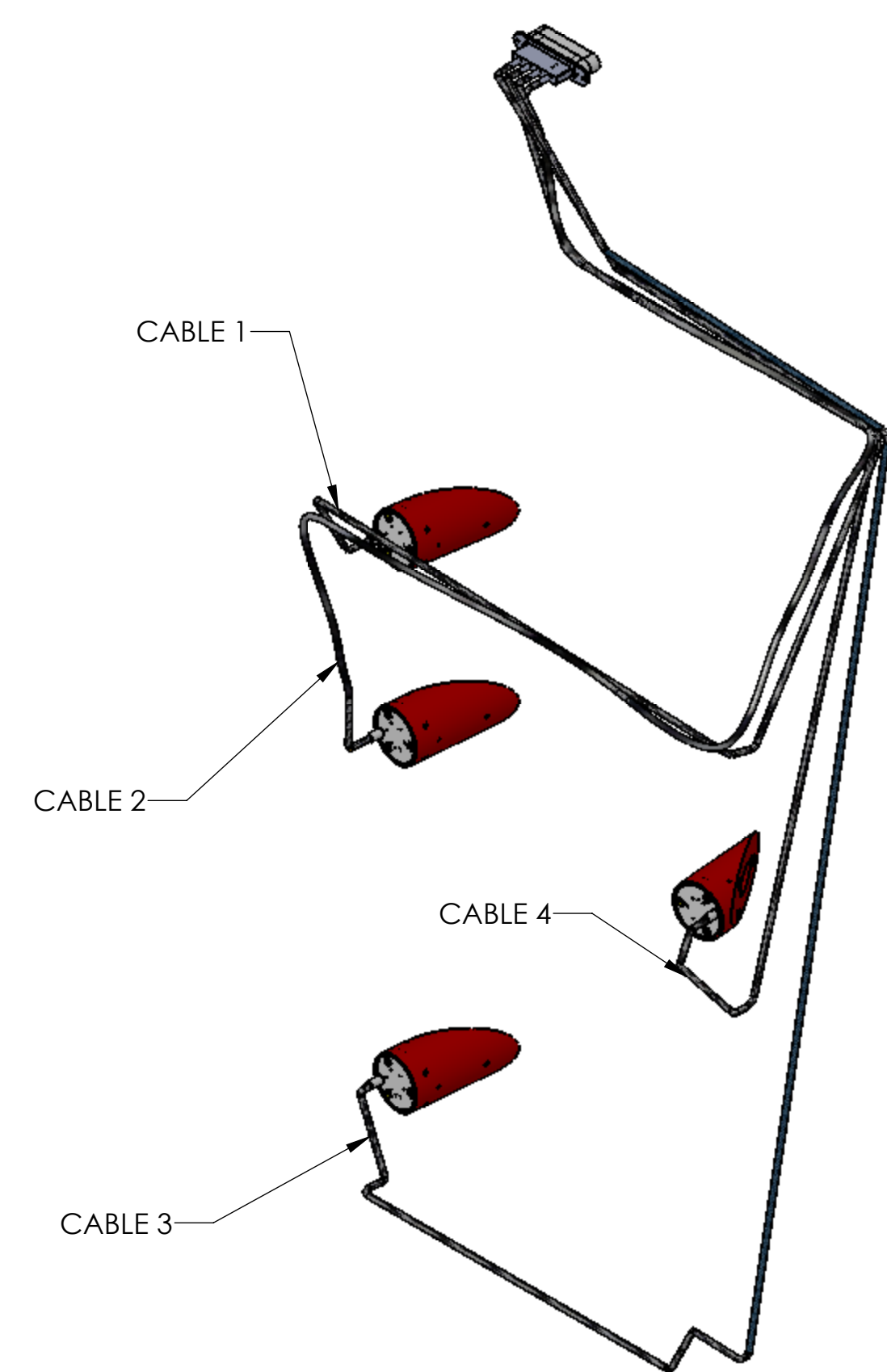
TO		
PHOTODETECTOR PD2		
PIN	WIRE NAME	SIGNAL
SHELL	(SHIELD)	
1	(CABLE 2) WIRE 10	ANODE
2	(CABLE 2) WIRE 22	SENSE
3	(CABLE 2) WIRE 9	CATHODE

V25AC-36 CABLE #1 ASSEMBLY CIRCUIT SUMMARY

TO		
PHOTODETECTOR PD1		
PIN	WIRE NAME	SIGNAL
SHELL	(SHIELD)	
1	(CABLE 4) WIRE 13	ANODE
2	(CABLE 4) WIRE 25	SENSE
3	(CABLE 4) WIRE 12	CATHODE



BILL OF MATERIALS				
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	LENGTH "A"
1	TICOR # TS0125-3	DB25 MALE CONNECTOR (J1) FOR UHV (PEEK)	1	
2		DB25 CONNECTOR BACKSHELL FOR UHV (STAINLESS)	1	
3	D1003013	SLC ACB PHOTODETECTOR ASSY	4	
4	COONER WIRE # CZ1104 29GA PFA INSULATED BIOMEDICAL WIRE	4 COND. CABLE 29GA PFA INSULATED (WITH PEEK OVERBRAID) 5 NO SHIELD. - PARTS SUPPLIED BY LIGO	4	
5	PART # 6759	PEEK BRAID - PART #6759 MANUFACTURED WITH ZEUS 0.016" BLACK PEEK DRAWN MONOFILAMENT - SUPPLIED BY LIGO	4	
6	GLENAIR 600-052	GLENAIR 600-052 STANDARD BRAID CLAMP	8	
7	D1003014	PD BACK PEEK	1	
8	D1003239	ARM CAVITY BAFFLE ALS PD PCB	1	
9	D1003028	PD PCB SUPPORT	1	



ISO VIEW FOR REF ONLY

V25AC - V-DB25 M/S1-36-4_MM4PIN F/S		
STANDARD USE FOR THIS CABLE		
SUBSYSTEM	AIR/VAC	STANDARD USE
ISC	IN-VAC	ACB (4) PHOTODIODE INTERFACE CABLE

* NOTE: THE OVERALL LENGTH IS MEASURED FROM PIN TIP (25 PIN) TO PIN TIP (4 PIN) OF THE CABLE. Use whatever length is necessary for the internal wiring of the connectors and strip length to achieve the correct overall length.