

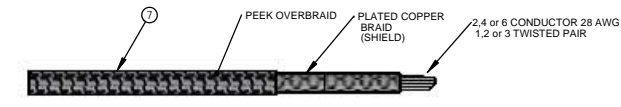
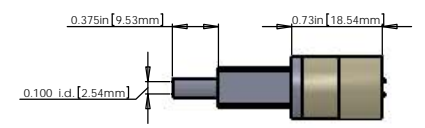
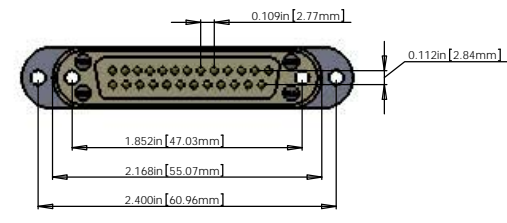
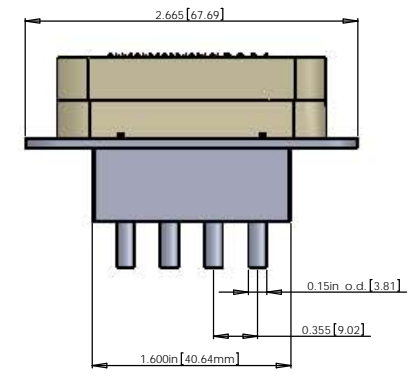
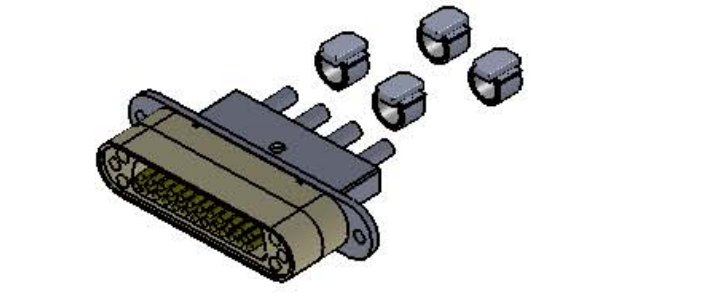
REV.	DATE	DCN #	DRAWING TREE #

NOTES CONTINUED:
 ○ SCRIBE, ENGRAVE, OR MECHANICALLY STAMP TWO INKS OR DYED DRAWING PART NUMBERS AND REVISION ON NOTED SURFACE FOLLOWED ON THE NEXT LINE BY A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE OF HIGH CHARACTERS. EXAMPLE: DXXXXXXVY-SN001. A VIBRATORY TOOL MAY BE USED.

V25U CABLE ASSEMBLY CIRCUIT SUMMARY

V-DB25 M/S1-43,30,24,29-2_QPD,PZI,OTAS

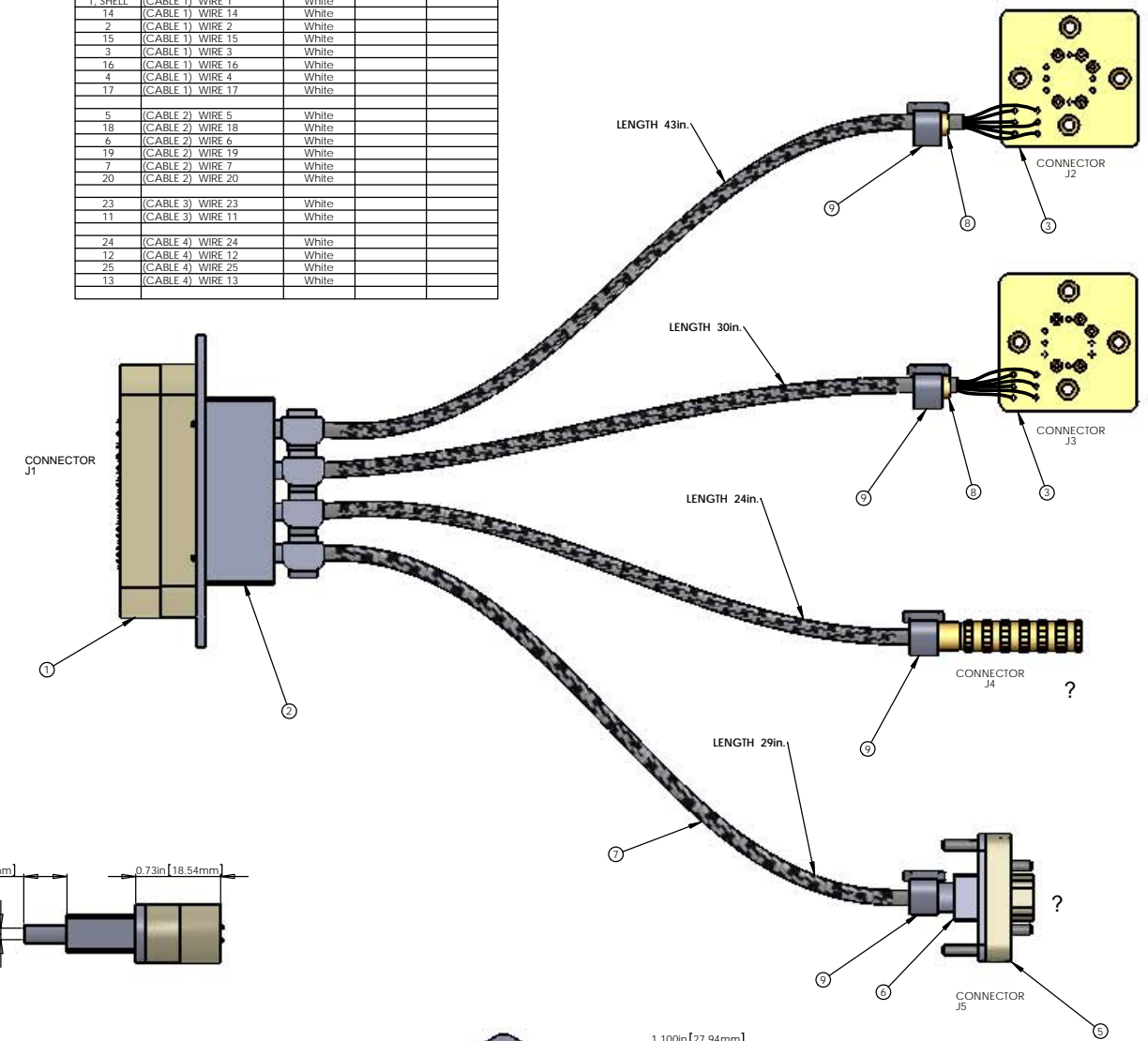
FROM				
CONNECTOR J1 - 25 PIN MALE SUBMINI D CONNECTOR (PEEK)				
PIN	WIRE NAME	COLOR	LENGTH	TWISTED PAIR
1	SHELL (SHIELD)			(SHIELD)
14	(CABLE 1) WIRE 14	White		
2	(CABLE 1) WIRE 2	White		
15	(CABLE 1) WIRE 15	White		
3	(CABLE 1) WIRE 3	White		
16	(CABLE 1) WIRE 16	White		
4	(CABLE 1) WIRE 4	White		
17	(CABLE 1) WIRE 17	White		
5	(CABLE 2) WIRE 5	White		
18	(CABLE 2) WIRE 18	White		
6	(CABLE 2) WIRE 6	White		
19	(CABLE 2) WIRE 19	White		
7	(CABLE 2) WIRE 7	White		
20	(CABLE 2) WIRE 20	White		
23	(CABLE 3) WIRE 23	White		
11	(CABLE 3) WIRE 11	White		
24	(CABLE 4) WIRE 24	White		
12	(CABLE 4) WIRE 12	White		
25	(CABLE 4) WIRE 25	White		
13	(CABLE 4) WIRE 13	White		



BILL OF MATERIALS

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	LENGTH
1	CUSTOM DB25 MALE	DB25 MALE CONNECTOR (J1) FOR UHV (PEEK)	1	
2	CUSTOM BACKSHELL	DB25 CONNECTOR BACKSHELL FOR UHV (STAINLESS)	1	
3		QPD FEMALE CONNECTOR (J2,J3) FOR UHV (PEEK)	2	
4		LEMO 2 PIN CONNECTOR (J4) FOR UHV (STAINLESS)	1	
5	CUSTOM MICRO D FEMALE	9 PIN MICRO D FEMALE CONNECTOR (J5) FOR UHV (PEEK)	1	
6	CUSTOM BACKSHELL	MICRO 9PIN D BACKSHELL FOR UHV (STAINLESS)	1	
7	C1	9 COND. (1,2 or 3 TW PAIR+ SHIELD) CABLE WITH COPPER BRAID (SHIELD) AND PEEK OVERBRAID	4	43in., 30in., 24in., 29in.
8		3/16" SPACER 1/4" LENGTH 0.115" I.D.	2	
9	GLENAIR 600-052	GLENAIR 600-052 STANDARD BRAID CLAMP	4	
10		#2-56 ALLEN HEAD MACHINE SCREW	4	
11		#4-40 UNC ALLEN HEAD MACHINE SCREW	2	

NOTES: (UNLESS OTHERWISE SPECIFIED)
 1. MATERIAL: a. CONNECTOR SHELL - PEEK
 b. BACKSHELL - STAINLESS STEEL WITH VENT HOLE
 c. CONTACTS - BERYLLIUM COPPER ALLOW C17300 0.000050 MIN. GOLD OVER NICKEL
 d. HARDWARE - CORROSION RESISTANCE STEEL, PASSIVATED
 e. PEEK BRAID - PEEK CARBON FIBRE LOADED
 2. CABLE 2, 4 or 6 COND. 28 AWG. (40 STRD 44 AWG) WITH 2 LAYERS OF KAPTON TAPE 1,2 or 3 TWISTED PAIRS (4 TO 5 TWISTS PER INCH) OVERALL 40AWG SILVER PLATED COPPER BRAID 90% COVERAGE OVERALL PEEK BRAID MIN. 50% COVERAGE OVERALL CABLE O.D. WILL BE APPROX. 0.240 IN.



V25U CABLE ASSEMBLY CIRCUIT SUMMARY

TO

CONNECTOR J2 - QPD FEMALE CONNECTOR (PEEK)

Pin	Wire Name	SIGNAL
1	SHELL (SHIELD)	SHIELD
1B	(CABLE 1) WIRE 2	QPD 4 ANODE 4
2B	(CABLE 1) WIRE 15	QPD 4 ANODE 3
3B	(CABLE 1) WIRE 3	QPD 4 ANODE 2
4B	(CABLE 1) WIRE 16	QPD 4 ANODE 1
5B	(CABLE 1) WIRE 4	QPD 4 SENSE
6B	(CABLE 1) WIRE 17	QPD 4 CATHODE

V25U CABLE ASSEMBLY CIRCUIT SUMMARY

TO

CONNECTOR J3 - QPD FEMALE CONNECTOR (PEEK)

Pin	Wire Name	SIGNAL
N/C	(SHIELD)	SHIELD
1B	(CABLE 2) WIRE 5	QPD 3 CATHODE
2B	(CABLE 2) WIRE 18	QPD 3 SENSE
3B	(CABLE 2) WIRE 6	QPD 3 ANODE 4
4B	(CABLE 2) WIRE 19	QPD 3 ANODE 3
5B	(CABLE 2) WIRE 7	QPD 3 ANODE 2
6B	(CABLE 2) WIRE 20	QPD 3 ANODE 1

V25U CABLE ASSEMBLY CIRCUIT SUMMARY

TO

CONNECTOR J4 - PZI CONNECTOR (MALE LEMO) (PEEK)

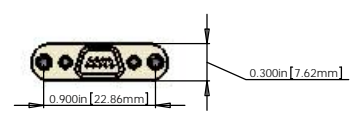
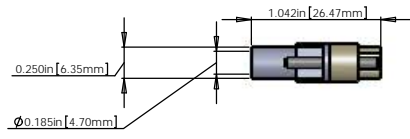
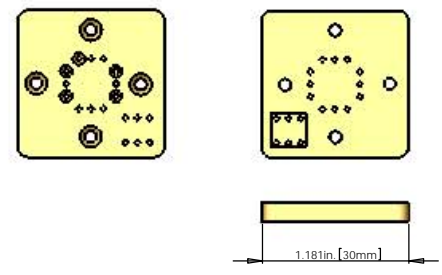
Pin	Wire Name	SIGNAL
N/C	(SHIELD)	SHIELD
1B	(CABLE 3) WIRE 23	NEGATIVE
2B	(CABLE 3) WIRE 11	POSITIVE

V25U CABLE ASSEMBLY CIRCUIT SUMMARY

TO

CONNECTOR J5 - OTAS CONNECTOR (PEEK)

Pin	Wire Name	SIGNAL
N/C	(SHIELD)	SHIELD
1B	(CABLE 4) WIRE 24	TSENSE READ
2B	(CABLE 4) WIRE 12	+15 TSENSE BIAS
3B	(CABLE 4) WIRE 25	GND
4B	(CABLE 4) WIRE 13	HEATER DRIVE



STANDARD USE FOR THIS CABLE

SUBSYSTEM	STANDARD USE
ISC	QPD'S (QUAD PHOTO DIODE)
ISC	PIEZO
ISC	AS-OMC THERMAL ACTUATION SYSTEM

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)
 1. INTERPRET DRAWING PER ASME Y14.5-1994.
 2. REMOVE ALL SHARP EDGES: R.02 MIN.
 3. DO NOT SCALE FROM DRAWING.
 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

DIMENSIONS ARE IN: TOLERANCES: .XX ± .XXX ± ANGULAR: ±

MATERIAL: Material <not specified> FINISH: μin/100

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)
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DIMENSIONS ARE IN: TOLERANCES: .XX ± .XXX ± ANGULAR: ±

MATERIAL: Material <not specified> FINISH: μin/100

CAUTION: CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY

PART NAME: CUSTOM CABLE SPECIFICATION V25U

DESIGNER	DATE	SCALE	DWG. NO.	REV.

SCALE: 2:1 PROJECTION: SHEET 1 OF 1