Amphenol
Aerospace

PDS-335

AGNOSTIC EMBEDDED RUGGED MEDIA CONVERTERS

Amphenol's Agnostic Embedded Rugged Media Converters utilize Amphenol's long-time trusted MIL-DTL-38999 connectors and receive data over a Samtec HQDP ribbon for attachment into a subsystem. These converters output to a MIL-DTL-38999 connector embedded with high performance Amphenol contacts. These units can be configured with any plating, shell rotation, HQDP ribbon length, and HQDP connector type. These features are a perfect fit for any application being used in harsh environment avionics, ground systems, or naval applications.

AVAILABLE OPTIONS:

- 2 Channel Copper/Fiber and Fiber/Copper
- 4 Channel Copper/Fiber and Fiber/Copper
- 4 Channel Copper to Fiber
- 6 Channel Copper to Fiber

FEATURES & BENEFITS:

- 3.3V Power
- Agnostic to Encoded data protocols
- 850nm multi-mode technology

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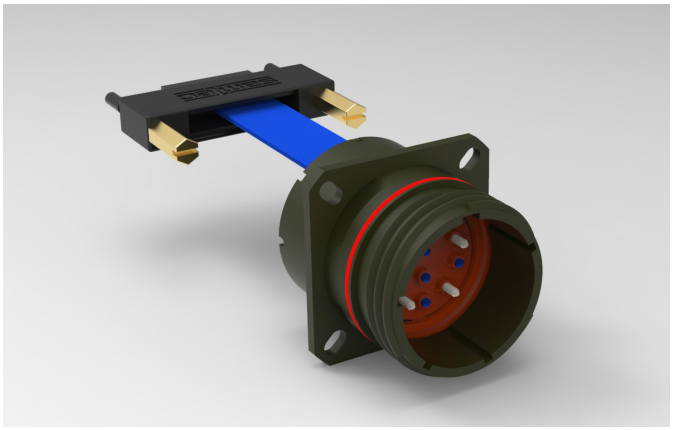
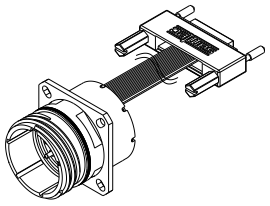
2 CHANNEL COPPER/FIBER AND FIBER/COPPER

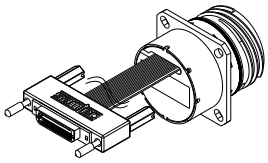
CF-020400-34X

- 2X channels of (2X fiber transmitters; 2X fiber receivers) of up to 4.25G of encoded data copper/fiber and fiber/copper
- AC Coupled SML inputs/outputs
- Transmit disable and loss of signal discretes
- MIL-DTL-38999 Shell Size 19
- M29504/4 fiber contacts

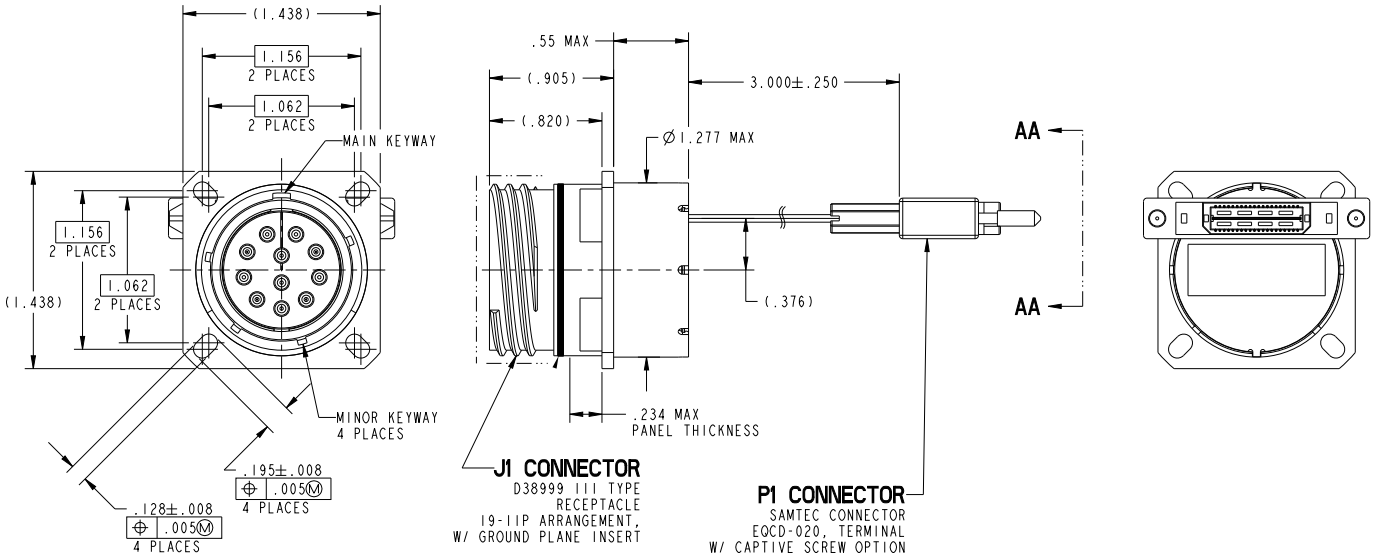




FRONT ISOMETRIC VIEW



REAR ISOMETRIC VIEW



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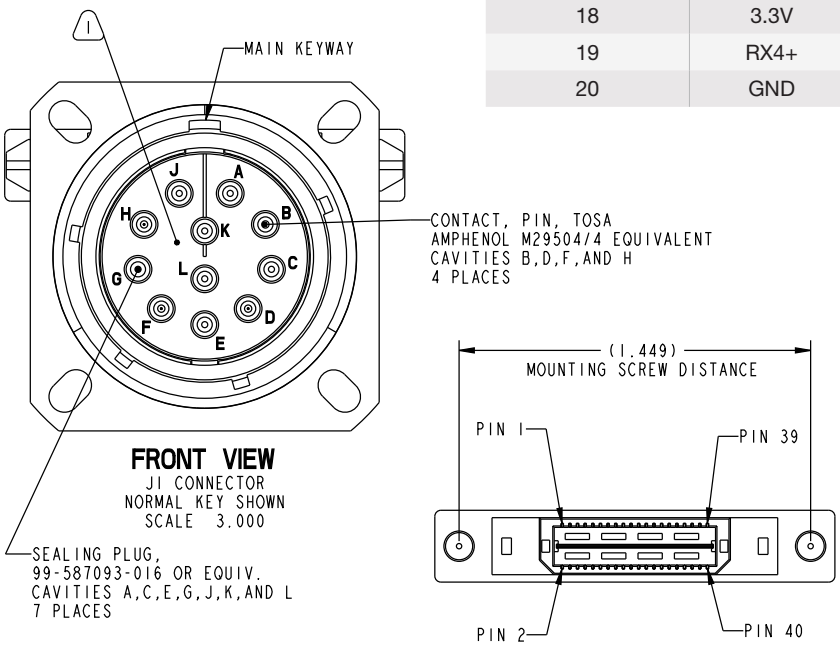
2 CHANNEL COPPER/FIBER AND FIBER/COPPER

PINOUT

J1 I/O CHART	
CAVITY ID	SIGNAL
B	TX1
D	TX2
F	TX3
H	TX4
A	
C	
E	
G	N/C
J	
K	
L	

P1 I/O CHART			
PIN ID	SIGNAL	PIN ID	SIGNAL
1	TXDIS1	21	N/C
2	RX1-	22	N/C
3	3.3V	23	N/C
4	RX1+	24	N/C
5	GND	25	N/C
6	TXDIS2	26	N/C
7	RX2-	27	N/C
8	3.3V	28	N/C
9	RX2+	29	N/C
10	GND	30	N/C
11	TXDIS3	31	N/C
12	RX3-	32	N/C
13	3.3V	33	N/C
14	RX3+	34	N/C
15	GND	35	N/C
16	TXDIS4	36	N/C
17	RX4-	37	N/C
18	3.3V	38	N/C
19	RX4+	39	N/C
20	GND	40	N/C



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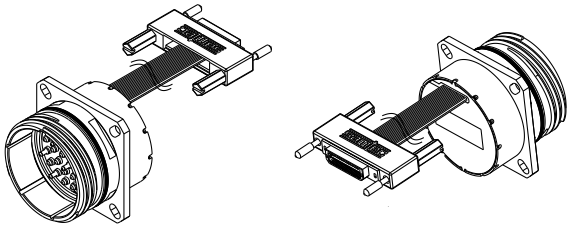
4 CHANNEL COPPER/FIBER AND FIBER/COPPER

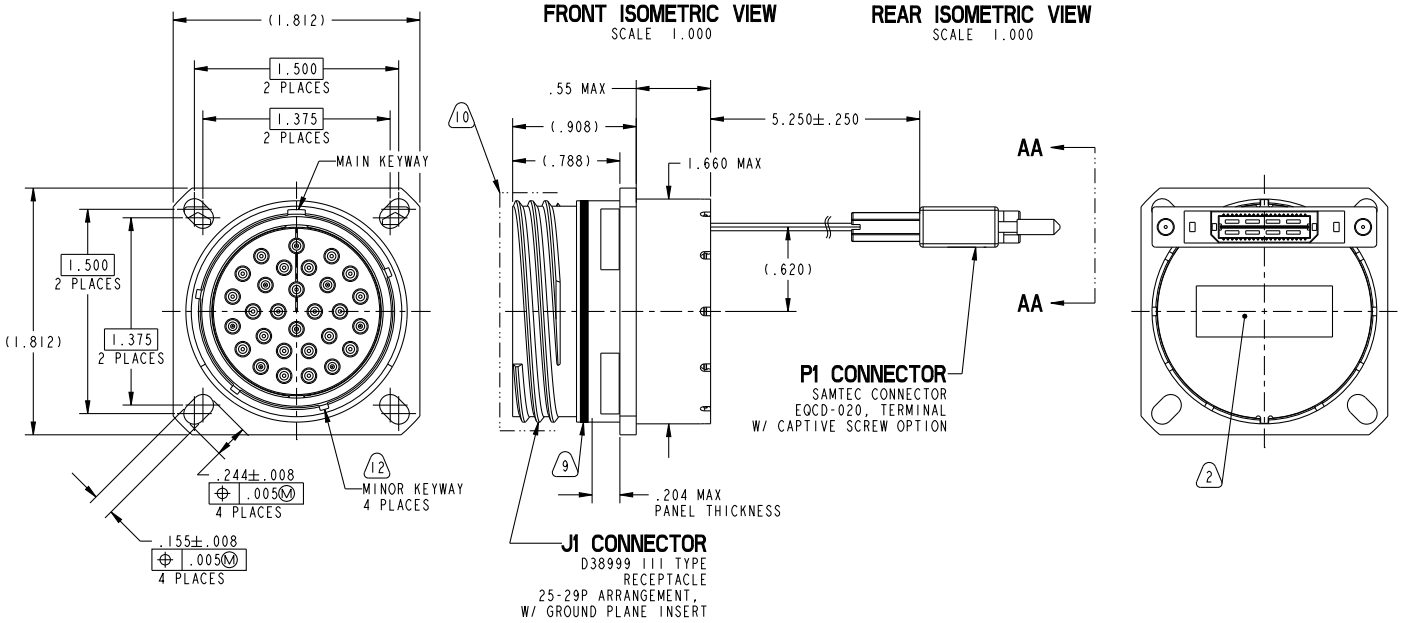
CF-020400-35X

- 4X channels of (4X fiber transmitters; 4X fiber receivers) of up to 4.25G of encoded data copper/fiber and fiber/copper
- AC Coupled SML inputs
- Transmit disable and loss of signal discretes
- MIL-DTL-38999 Shell Size 25
- M29504/4 fiber contacts



FRONT ISOMETRIC VIEW
SCALE 1.000

REAR ISOMETRIC VIEW
SCALE 1.000



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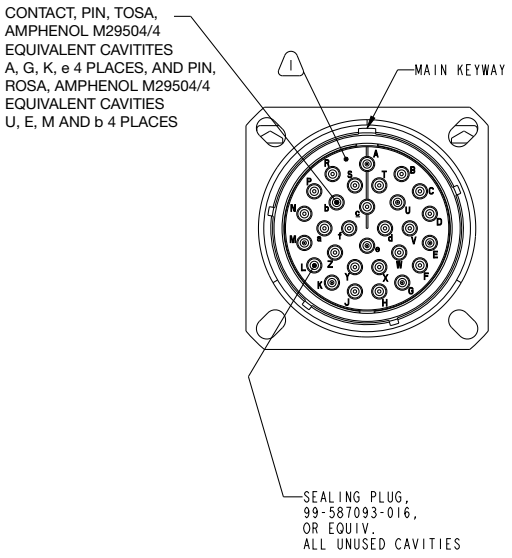
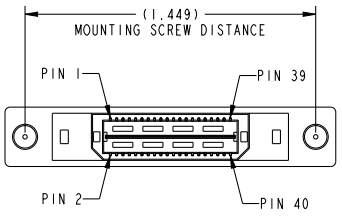
4 CHANNEL COPPER/FIBER AND FIBER/COPPER
PINOUT CHARTS

I/O CHART	
CAVITY ID	**SIGNAL**
A	TX1
U	RX1
G	TX2
E	RX2
K	TX3
M	RX3
e	TX4
b	RX4
B	
C	
D	
F	
H	
J	
L	
N	
P	
R	
S	N/C
T	
V	
W	
X	
Y	
Z	
a	
c	
d	
f	

P1 I/O CHART			
PIN ID	**SIGNAL**	**PIN ID**	**SIGNAL**
1	TXDIS1	21	TXDIS3
2	RX1-	22	RX3-
3	3.3V	23	3.3V
4	RX1+	24	RX3+
5	GND	25	GND
6	LOS1	26	LOS3
7	TX1-	27	TX3-
8	3.3V	28	3.3V
9	TX1+	29	TX3+
10	GND	30	GND
11	TXDIS2	31	TXDIS4
12	RX2-	32	RX4-
13	3.3V	33	3.3V
14	RX2+	34	RX4+
15	GND	35	GND
16	LOS2	36	LOS4
17	TX2-	37	TX4-
18	3.3V	38	3.3V
19	TX2+	39	TX4+
20	GND	40	GND





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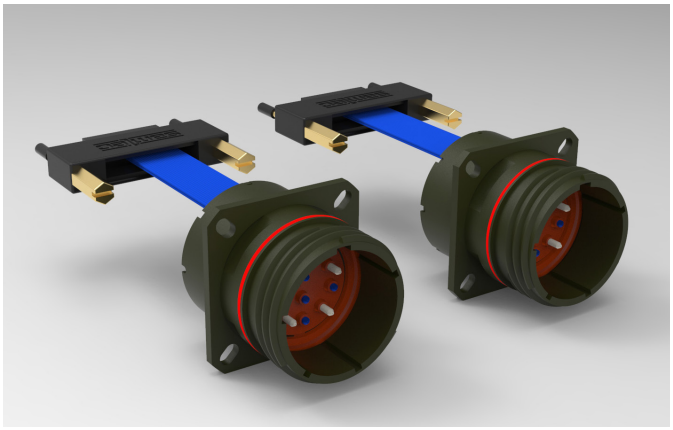
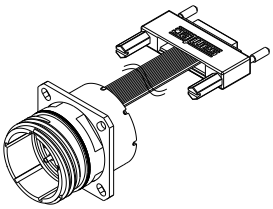
4 CHANNEL COPPER TO FIBER

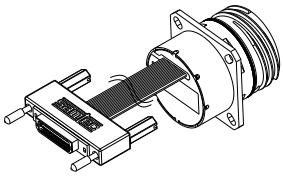
CF-020400-38X

- 4X lanes of (4X copper receivers; 4X fiber transmitters) of up to 4.25G of encoded data copper to fiber
- AC Coupled CML inputs
- Transmit disable discretes
- MIL-DTL-38999 Shell Size 19
- M29504/4 fiber contacts

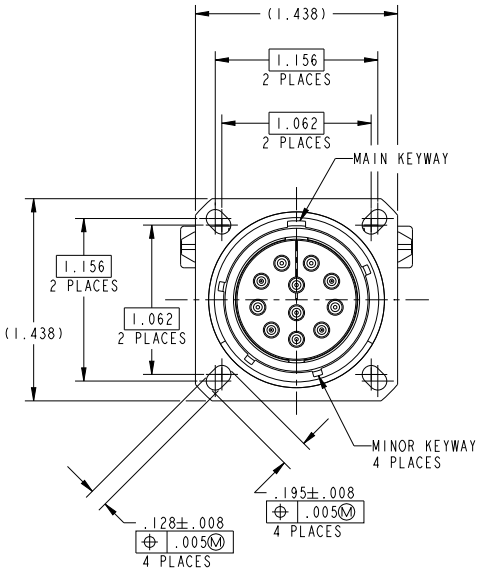


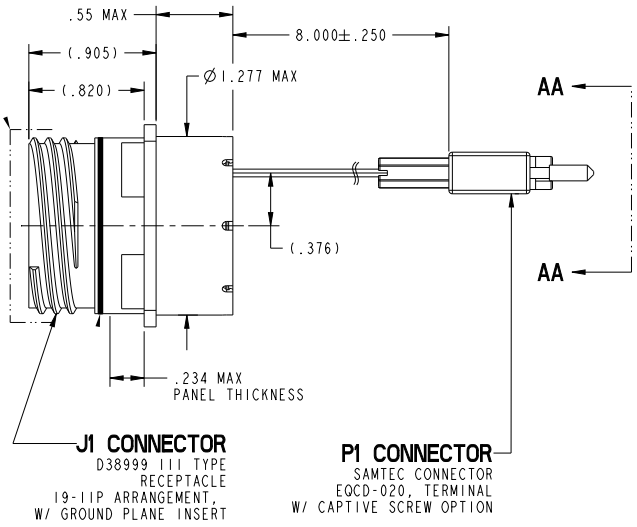


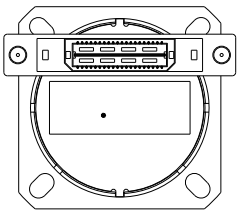
FRONT ISOMETRIC VIEW



REAR ISOMETRIC VIEW







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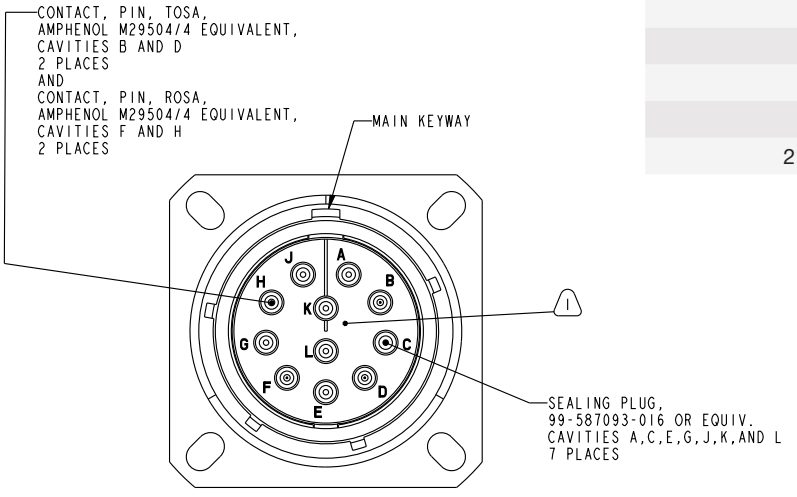
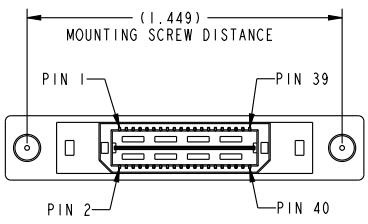
4 CHANNEL COPPER TO FIBER

PINOUT

P1 I/O CHART	
CAVITY ID	**SIGNAL**
A	N/C
B	TX2
C	N/C
D	TX1
E	N/C
F	RX1
G	N/C
H	RX2
J	N/C
K	N/C
L	N/C

P2 I/O CHART	
PIN NUMBER	**SIGNAL NAME**
1	LOS1
2	GND
3	TX1-
4	N/C
5	TX1+
6	TXDIS1
7	RX1-
8	3.3V
9	RX1+
10	3.3V
11	LOS2
12	GND
13	TX2-
14	N/C
15	TX2+
16	TXDIS2
17	RX2-
18	3.3V
19	RX2+
20	3.3V
21-40	NOT CONNECTED





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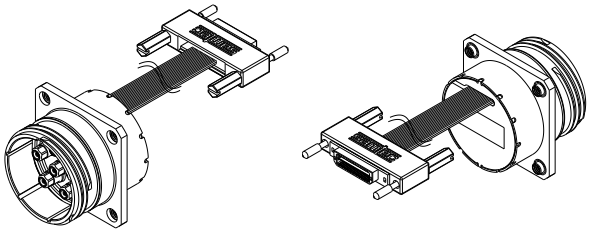
6 CHANNEL COPPER TO FIBER

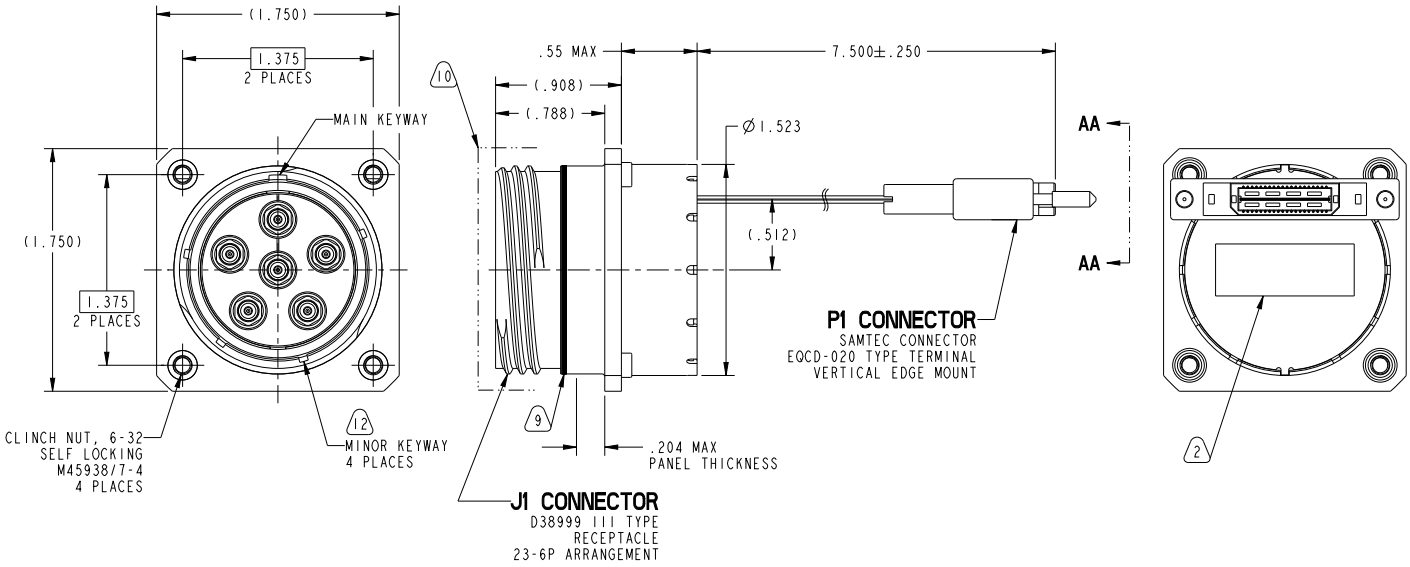
CF-020400-36X

- 5X fiber transmitter lanes (5X copper receiver; 5X fiber transmitter) of up to 10.3125Gbps of encoded data copper to fiber
- 1X Fiber receiver lanes (1X copper transmitters; 1X fiber receivers) of up to 10.2135Gbps of encoded data copper to fiber
- AC Coupled CML inputs
- Transmit disable and loss of signal discretes
- MIL-DTL-38999 Shell Size 23
- CTF-Quad Contacts (Quadrax form factor embedded fiber optic transmitters and receivers)



FRONT ISOMETRIC VIEW
SCALE 1.000

REAR ISOMETRIC VIEW
SCALE 1.000



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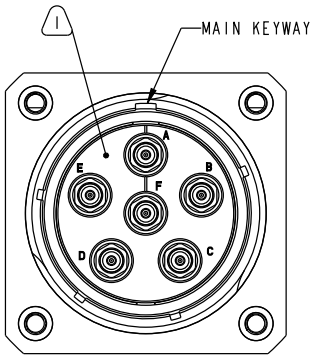
6 CHANNEL COPPER TO FIBER

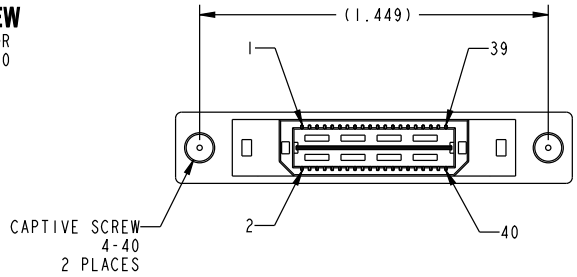
PINOUT

J1 I/O CHART	
CAVITY ID	SIGNAL
A	10G_RX1
B	10G_TX1
C	10G_TX2
D	10G_TX3
E	10G_TX4
F	10G_TX5

P1 I/O CHART			
PIN ID	SIGNAL	PIN ID	SIGNAL
1	LOS_RX1	21	TX_DIS_TX4
2	GND	22	GND
3	COPPER_TX1+	23	COPPER_RX4+
4	N/C	24	FAULT_TX4
5	COPPER_TX1-	25	COPPER_RX4-
6	TX_DIS_TX1	26	TX_DIS_TX5
7	GND	27	GND
8	COPPER_RX1+	28	COPPER_RX5+
9	FAULT_TX1	29	FAULT_TX5
10	COPPER_RX1-	30	COPPER_RX5-
11	TX_DIS_TX2	31	3.3V
12	GND	32	GND
13	COPPER_RX2+	33	3.3V
14	FAULT_TX2	34	GND
15	COPPER_RX2-	35	N/C
16	TX_DIS_TX3	36	3.3V
17	GND	37	GND
18	COPPER_RX3+	38	3.3V
19	FAULT_TX3	39	N/C
20	COPPER_RX3-	40	GND



FRONT VIEW
J1 CONNECTOR
SCALE 2.000



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