Amphenol
Aerospace

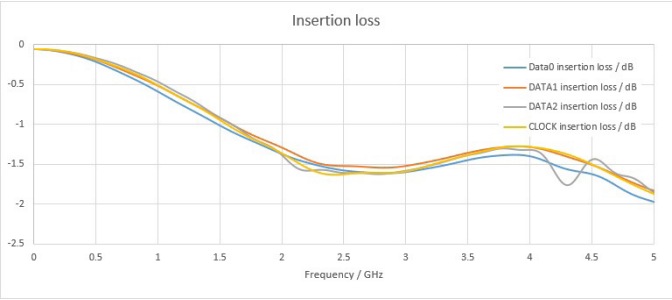
2M805 HIGH SPEED CONNECTORS

PDS-315

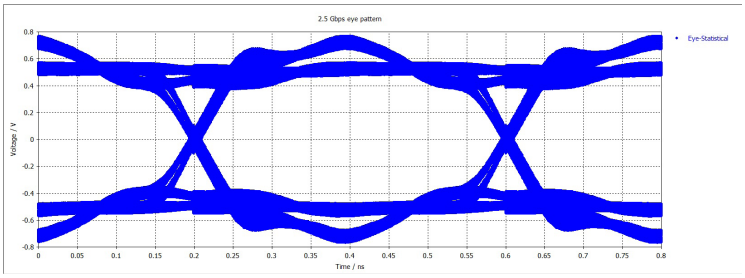
2M805 HIGH SPEED TRI-START ACME THREADS

The 2M805 High Speed Series of connectors is ideal for use in **USB 3.0, eSATA** and other **high speed databus** applications where space is limited. These connectors utilize Fluoropolymer inserts that are optimized for high speed capability. Multiple standard insert arrangements are available. This series features self-locking plugs with a ratcheting mechanism and a Tri-Start ACME thread that provides full mating in one turn. Plugs and receptacles are each available in two shell styles. The integral banding platform allows for direct termination of EMI shielding attachments and also allows for overmolding. Rear threads are also available for the attachment of backshells and other accessories. Contact termination styles include Crimp, PC Tail and Solder Cup.

INSERTION LOSS



EYE DIAGRAM



*Tested as a mated connector pair with crimp removable plug and PC tail receptacle.

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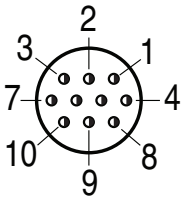
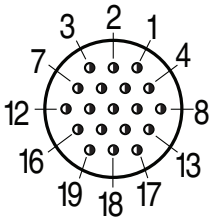
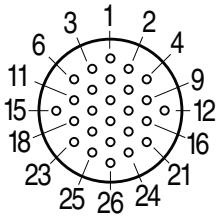
AVAILABLE ARRANGEMENTS AND RECOMMENDED PINOUTS



9-10



11-19



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USB 3.1 GEN 1 (3.0)

Connector Signal Layout 9-10

Contact Number	Signal Name	Signal Description
1	HS_DM	USB2-
2	Erase	Secure Erase
3	SSRX-	USB3 RX-
4	HS_DP	USB2+
5	SSTX-	USB3 TX-
6	SSTX+	USB3 TX+
7	SSRX+	USB3 RX+
8	ST_OC	Self Test Indication
9	VBUS	DC 5V
10	DGND	Digital Ground

GIGABIT ETHERNET

Connector Signal Layout 9-10

Contact Number	Signal Name	Signal Description
1	BI_DC+	BiDirectional C+ Blue
2	NC	No Connection
3	BI_DA-	BiDirectional A- Green
4	BI_DB-	BiDirectional B- Orange
5	BI_DC-	BiDirectional C- White/Blue
6	BI_DD-	BiDirectional D- Brown
7	BI_DA+	BiDirectional A+ White/Green
8	BI_DB+	BiDirectional B+ White/ Orange
9	NC	No Connection
10	BI_DD+	BiDirectional D+ White/Brown

HDMI 1.4

Connector Signal Layout 11-19

Contact Number	Signal Name	Signal Description
1	Data0+	TMDS Data0+
2	NC	Reserved - No Connections
3	Data1+	TMDS Data1+
4	Data0-	TMDS Data0-
5	Data0 shield	TMDS Data0 Shield
6	Data1 shield	TMDS Data1 Shield
7	Data1-	TMDS Data1-
8	Data2+	TMDS Data2+
9	Data2-	TMDS Data2-
10	Ground	Ground
11	Clock-	TMDS Clock-
12	Clock+	TMDS Clock+
13	Data2 shield	TMDS Data2 Shield
14	SCL	I^2C Serial Clock for DDC
15	SDA	I^2C Serial Data for DDC
16	Clock shield	TMDS Clock Shield
17	CEC	CEC
18	+SV	+SV
19	Hot Plug Detect	Hot Plug Detect

DVI-I (SINGLE-LINK)

Connector Signal Layout 12-26

Contact Number	Signal Name	Signal Description
1	Data0+	TMDS Data0+
2	Data0-	TMDS Data0-
3	Data0 shield	TMDS Data0 Shield
4	Data1+	TMDS Data1+
5	Data2+	TMDS Data2+
6	NC	No Connections
7	Data1-	TMDS Data1-
8	DDC Clock	DDC Clock
9	Clock+	TMDS Clock+
10	Data2-	TMDS Data2-
11	DDC Data	DDC Data
12	Clock Shield	TMDS Clock Shield
13	Data1 shield	TMDS Data1 Shield
14	Ground	Ground
15	+5V	+ 5V
16	Clock-	TMDS Clock-
17	Data2 shield	TMDS Data2 Shield
18	NC	No Connections
19	NC	No Connections
20	Hot Plug Detect	Hot Plug Detect
21	Horiz Sync	Analog Horizontal Sync
22	Analog Ground	Analog Ground
23	Vert Sync	Analog Vertical Sync
24	Blue	Analog Blue
25	Red	Analog Red
26	Green	Analog Green

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