

# Connectors & Cable Assemblies Incorporating HDMI™ Technology

#### **DESCRIPTION**

Tyco Electronics' connector incorporating High-Definition Multimedia Interface (HDMI™) technology is an interface for consumer electronics products such as digital television, set-top boxes and DVD players. HDMI supports standard, enhanced, or high-definition video, plus multi-channel audio on a single cable.

## **APPLICATIONS**

- Digital or High-Definition TV's
- Set-top Boxes
- · Video Game Consoles
- DVD Players
- · Desktop PC's

#### **KEY FEATURES**

- Simple User Friendly Connector
  - Replaces existing audio and digital cabling in one assembly
  - Easy-to-use friction lock design provides secure electrical contact and smooth cable insertion/extraction
- Full shielding for ESD protection and lead-free process available
- · With or without panel flange
- 19 positions and 5 Gbps of bandwidth to support video and multi-channel audio in a single cable

#### **MECHANICAL**

- Durability: 10.000 cycles
- Mating Force: 9.9 lbs. [44.1 N] Max.
- Unmating Force: 2.2 lbs. [9.8] Min. 8.8 lbs. [39.2] Max.

#### **TECHNICAL DOCUMENTS**

 Meets Industry Standard High-Definition Multimedia Interface



#### **CONNECTORS**

Part Specifications					Mounting Flange						
Product Number	PCB Mount Type	PCB Orientation	Number Of Ports	Packaging	(Dim A) Front Hold Down Legs	(Dim B) Back Hold Down Legs	Screw Size	(Dim C) CL of Mating Face to CL of Mounting Hole	(Dim D) Height (PCB- Top of Flange)	(Dim E) PCB Profile Depth	Mating Finish
1747981-1	SMT	R/A	1	Tape & Reel	1.8	2.2	-	-	-	11.55	Α
1747981-2	SMT	R/A	1	Tape & Reel	1.5	1.5	-	-	-	11.55	Α
1-1747981-1	SMT	R/A	1	Tray	1.8	2.2	M3 x 0.5	7.98	14.25	11.55	Α
1-1747981-2	SMT	R/A	1	Tray	1.5	1.5	M3 x 0.5	7.98	14.25	11.55	Α
1-1747981-3	SMT	R/A	1	Tray	1.8	2.2	4-40	10.08	16.05	11.55	Α
1-1747981-4	SMT	R/A	1	Tray	1.8	2.2	M3 x 0.5	10.08	16.05	11.55	Α
1-1747981-5	SMT	R/A	1	Tape & Reel	1.5	1.5	M3 x 0.5	7.98	14.25	11.55	Α
2-1747981-3	SMT	R/A	1	Tape & Reel	1.8	2.2	M3 x 0.5	10.08	16.05	11.55	С
8-1747981-1	SMT	R/A	1	Tray	1.8	2.2	M3 x 0.5	7.98	14.25	11.55	Α
1746679-1	T/H	R/A	1	Tray	1.8	2.2	M3 x 0.5	9.00	15.27	12.9	В
1903015-1	SMT	R/A	1	Tape & Reel	1.9	1.9	-	-	-	9.85	С
1903015-2	SMT	R/A	1	Tray	1.9	1.9	Ø2.65	9.00	15.40	9.85	С
1903015-3	SMT	R/A	1	Tape & Reel	1.9	1.9	M3 x 0.5	9.00	15.40	9.85	С
1903015-4	SMT	R/A	1	Tray	1.9	1.9	M3 x 0.5	9.00	15.40	9.85	С
5-1903015-1	SMT	R/A	1	Tape & Reel	1.9	1.9	-	-	-	9.85	В
5-1903015-2	SMT	R/A	1	Tray	1.9	1.9	Ø2.65	9.00	15.40	9.85	В
5-1903015-4	SMT	R/A	1	Tray	1.9	1.9	M3 x 0.5	9.00	15.40	9.85	В
1888811-1	T/H	R/A	2	Tray	2.1	2.1	M3 x 0.5	10.08	28.00	20.55	D
1888540-1	T/H	R/A	1*	Tray	1.8	2.2	M3 x 0.5	10.08	27.05	20.55	D
2007435-1	T/H	Flag	1	Tray	3.7	3.7	-	_	-	23.10	D

CL= Center Line

All dimensions in mm unless otherwise stated

Mating Finish - Gold or Gold Flash over Palladium Nickel

Mating Finish -  $\bf A$  = Gold Flash over Palladium Nickel -  $\bf B$  =  $12\mu$  Gold -  $\bf C$  =  $30\mu$  Gold -  $\bf D$  = Either A or B

\*HMDI over E-SATA



## Right Angle Surface Mount Header, No Flange (Long Body)

#### **Part Numbers:**

1747981-1 1747981-2

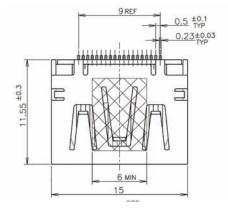
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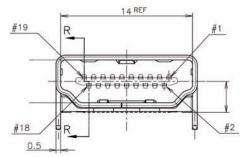
108-78180-1

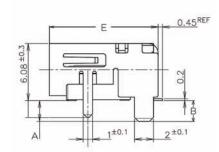
# **Qualification Test Report:**

501-5640









## Right Angle Surface Mount Header with Flange (Long Body)

#### Part Numbers:

- 1-1747981-1
- 1-1747981-2
- 1-1747981-3
- 1-1747981-4
- 1-1747981-5
- 2-1747981-3
- 8-1747981-1

# **Product Specification:**

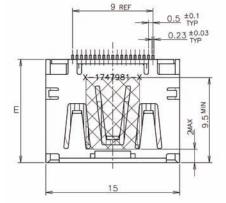
108-78180-1

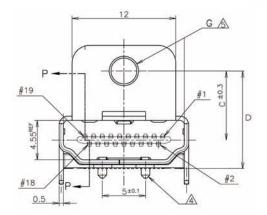
#### **Qualification Test Report:**

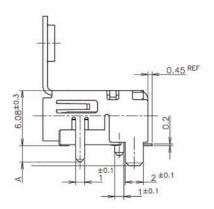
501-5640

501-5640-1









## Right Angle Surface Mount Header, No Flange (Short Body)

### **Part Numbers:**

1903015-1 5-1903015-1

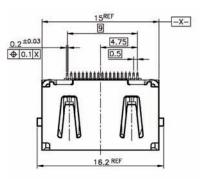
#### **Product Specification:**

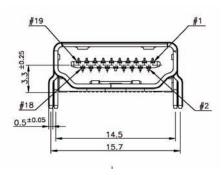
108-78180-2

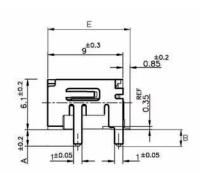
## **Qualification Test Report:**

501-5640-2









## Right Angle Surface Mount Header with Flange (Short Body)

#### **Part Numbers:**

1903015-2

1903015-3

1903015-4

5-1903015-2

5-1903015-4

## **Product Specification:**

108-78180-2

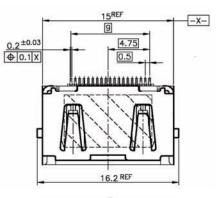
### **Qualification Test Report:**

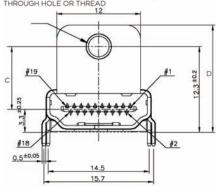
501-5640

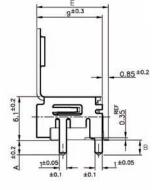
501-5640-2

501-5841-2









## Right Angle Through Hole Header with Flange

## **Part Numbers:**

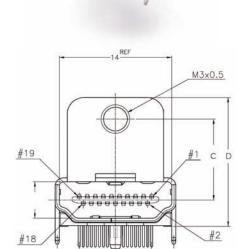
1746679-1

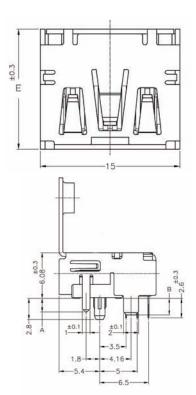
# **Product Specification:**

108-78180

# **Qualification Test Report:**

501-5640



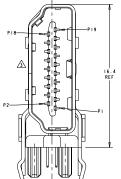


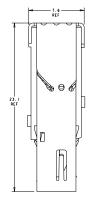
## Flag Through Hole Header

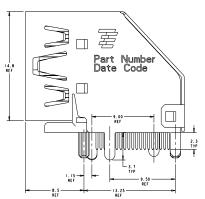
## **Part Numbers:**

2007435-1







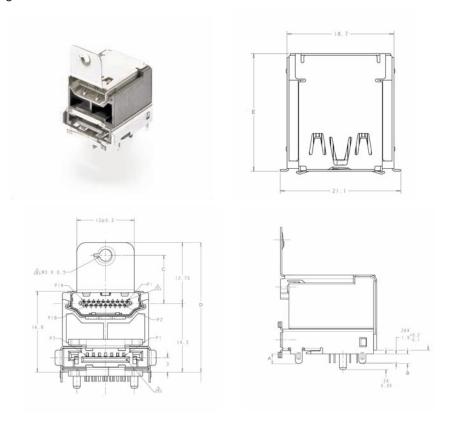


## Stacked Right Angle Through Hole Header

# Part Number:

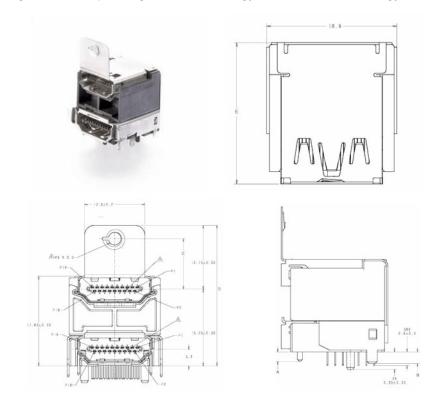
1888540-1

# **Qualification Test Report:** 501-662



## Stacked Right Angle Through Hole Incorporating HDMI Technology over eSATA Technology

# **Part Number:** 1888811-1





#### **ELECTRICAL**

Voltage Rating: 40 VAC maximum

· Contact Current Rating: 0.5 A minimum

• Dry Circuit Resistance -

Contacts:  $30~\text{m}\Omega$  maximum initial Shell:  $50\text{m}\Omega$  maximum initial

• Dielectric Withstanding Voltage -

Unmated: 500 VAC Mated: 300 VAC

• Insulation Resistance -

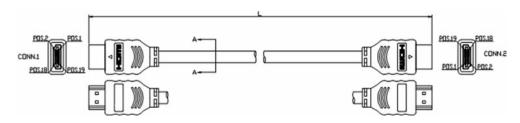
Unmated:  $100 \text{ m}\Omega$  maximum Mated:  $10 \text{ m}\Omega$  minimum

#### **ENVIRONMENTAL**

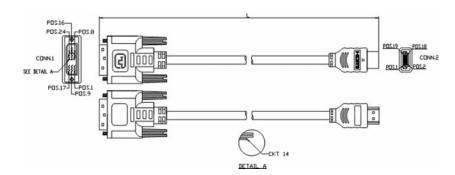
Temperature Range: -55°C to + 105

#### **CABLE ASSEMBLY PART NUMBERS**

### Cable Assemblies Incorporating HDMI Technology to Cable Assemblies Incorporating HDMI Technology

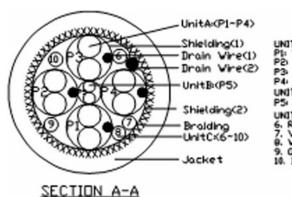


Dimension	Part			
L	Number			
1000 -20	1770019-6			
750 -10	1770019-5			
500 -10	1770019-4			
250 -10	1770019-3			
3000 -30	1770019-2			
2000 -20	1770019-1			



Dimension	Part			
L	Number			
1000 -20	1770020-6			
750 -10	1770020-5			
500 -10	1770020-4			
250 -10	1770020-3			
3000 -30	1770020-2			
2000 -20	1770020-1			

SHI	ELD BRAID	SHELL	1272.00	SHELL	Soul	
C	BLUE	19	YES	19	YES	
	DRANGE	18	YES	18	YES	
В	YELLOV	17		17		
C	GREEN	16		16	Sold	
C	WHITE	15	YES	15	YES	
C	VIOLET	14	YES	14	YES	
C	RED	13		13	-	
100	WHITE	12	2-500	12	1	
Α	DRAIN VIRE	11	YES	11	YES	
	GREEN	10	YES	10	YES	
500	WHITE	9	(11.16.1)	9		
A	DRAIN VIRE	8		8	3 -	
	GREEN	7	YES	7	YES	
1000	WHITE	6	YES	6	YES	
A	DRAIN VIRE	5		5	100	
5.5	GREEN	4		4		
112	WHITE	3	YE2	3	YES	
A	DRAIN VIRE	2	YES	5	YES	
131	GREEN	1		1	8 12	
UNIT	VIRE COLOR	PIN	HST		T2H	
CABLE		CON	IN.1	CDNN.2		



UNIT A
P1: VMITE-GREEN
P2: VMITE-GREEN
P3: VMITE-GREEN
P4: VMITE-GREEN
UNIT B
P5: YELLOV-DRANGE
UNIT C
6: RED
7: VIOLET
8: VMITE
9: GREEN
10: BLUE

# Connectors & Cable Assemblies Incorporating HDMI Technology

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The Support Center also provides:

- Cross-Reference from Non-compliant to Compliant Products
- Ability to browse RoHS Compliant Products in our on-line catalog
- Downloadable Technical Data Customer Information Presentation
- More detailed information regarding the definitions used above
- So whatever your questions when it comes to RoHS, we've got the answers at www.tycoelectronics.com/leadfree



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