

#### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com





# **HDMI** sockets for PCBs - reliable connectivity for your electronics projects

HDMI sockets from Weidmüller offer a high-quality solution for the transmission of video, audio and Ethernet signals (HEC) in industrial applications

#### **Features and benefits:**

- Compact design: Ideal for space-saving PCB designs thanks to various outlet directions
- High data transmission rate: Supports HDMI 2.0 and 4K resolutions and Ethernet up to 100 Mbit/s
- Easy integration: Standardized design facilitates mounting and integration into the device
- EMC protection: Reliable protection against interference for clean data transmission
- Perfectly suited for processing in automated SMT processes thanks to tape-on-reel packaging
- Durability: Robust design ensures a reliability in demanding environments

#### General ordering data

Version	, female header, Solder flange, SMD solder con- nection, 0.50 mm, Number of poles: 19, 90°, Gold over nickel, black, Reel
Order No.	<u>3107650000</u>
Туре	HDMI A S1H 2.0N1 RL
GTIN (EAN)	4099987174541
Qty.	3,000 pc(s).
Packaging	Reel



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## **Technical data**

### **Dimensions and weights**

Depth	11.55 mm	Depth (inches)	0.455 inch
Height	6.18 mm	Height (inches)	0.243 inch
Width	15 mm	Width (inches)	0.591 inch
Net weight	0.003 g		

### **System specifications**

LED	No	Mounting onto the PCB	SMD solder connection
Number of poles	19	Number of solder pins per pole	1
Outgoing elbow	90°	Pitch in inches (P)	0.02 "
Pitch in mm (P)	0.5 mm	Plugging cycles	≥ 10000
Protection degree	IP20	Shield surface	nickel-plated
Shield tabs	none	Shielding	Yes
Shielding material	Copper alloy	Side termination, characteristic	Solder flange
Soldering process	Reflow soldering, Manual	Type of connection	
	soldering		Socket connector

#### **Electrical properties**

Dielectric strength, contact / contact	500 V AC / 1 min	Insulation strength	≥ 100 MΩ	
Rated voltage	0.5 V	<del></del>		

#### **Material data**

Insulating material	LCP	Colour	black
Colour chart (similar)	RAL 9011	Insulation strength	≥ 100 MΩ
Moisture Level (MSL)	1	UL 94 flammability rating	V-0
Contact base material	Copper alloy	Contact material	Copper alloy
Contact surface	Gold over nickel	Storage temperature, min.	-20 °C
Storage temperature, max.	65 °C	Operating temperature, min.	-20 °C
Operating temperature, max.	65 °C		

## **Packing**

Packaging	Reel	VPE length	0 mm
VPE width	0 mm	VPE height	0 mm

#### Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	EC002637	ETIM 9.0	EC002637
ETIM 10.0	EC002637	ECLASS 9.1	27-44-04-02
ECLASS 10.0	27-44-04-02	ECLASS 11.0	27-46-02-01
ECLASS 12.0	27-46-02-01	ECLASS 13.0	27-46-02-01
ECLASS 14.0	27-46-02-01	ECLASS 15.0	27-46-02-01

### **Approvals**

ROHS Conform

### **Environmental Product Compliance**

RoHS Compliance Status	Compliant without exemption	
REACH SVHC	No SVHC above 0.1 wt%	



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## **Technical data**

#### **Downloads**

Engineering Data	CAD data – STEP
Technical Documentation	3107650000 HDMI A S1H 2.0N1 RL 20241127
	Customer Drawing
	Customer Drawing

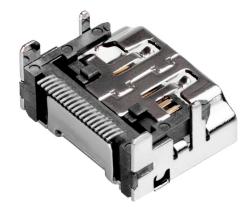


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## **Drawings**



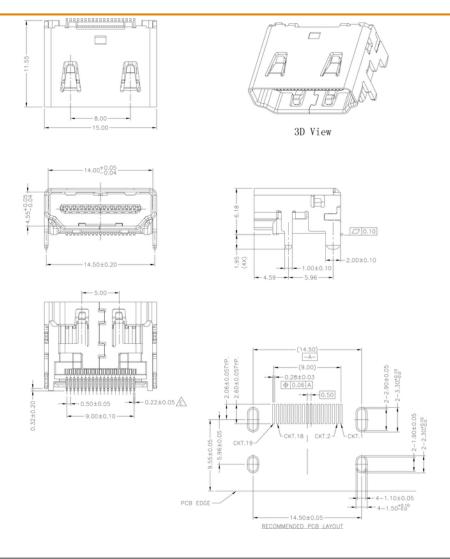


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## Drawings





### Recommended reflow soldering profile

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### Reflow soldering profile

The perfect soldering profile for SMT Surface Mount Technology is one the most exiting question in SMT production. But there are more than one correct answer: The diagram of temperature-on-time is related to processing features of solder paste and to maximum load of components.

We have to consider the following parameters:

- · Time for pre heating
- Maximum temperature
- Time above melting point
- Time for cooling
- · Maximum heating rate
- · Maximum cooling rate

We recommend a typical solder profile with associated process limits. With preheating components and board are prepared smoothly for the solder phase. Heating rate is typically  $\leq +3$ K/s. In parallel the solder paste is ,activated'. The time above melting point of 217°C the paste gets liquid and components and boards begin to connect. The maximum temperature of 245°C to 254°C should stay between 10 and 40 seconds. In the cooling phase at  $\geq$  -6K/s solder is cured. Board and components cool down while avoiding cold cracks.