

HDMI 2.1 A Connector System – G45AA Series

HIGH PERFORMANCE DIGITAL AUDIO/VIDEO INTERCONNECT SOLUTION

HDMI 2.1 enhancements from Amphenol improve picture and sound quality and usability. HDMI 2.1 also includes reduced tearing enhances clarity with Variable Refresh Rate (VRR) and supports higher frame rates for smoother video, but it also allows variable frame rates.

- Higher video resolutions and faster refresh rates– 8K60Hz and 4K120Hz , resolution up to 10K
- Dynamic HDR support ensures every moment of a video is displayed at its ideal values for depth, detail, brightness, contrast and wider color gamuts
- HDMI 2.1 Cable supports the 48G bandwidth for uncompressed HDMI 2.1b feature support, low EMI emission and is backwards compatible with earlier versions

FEATURES

- HDMI 2.1 compliant
- Insert molding for better SI and high retention force
- Mounting shielding flange option
- Stainless Steel/Copper shielding material customized
- RoHS compliant and Halogen free



TARGET MARKETS



BENEFITS

- Accommodates 48Gb/s of bandwidth
- Backward compatible with earlier HDMI product
- Ensures reliable and stable connections
- EProtects against ESD, RFI and EMI emission
- Enhances reliability of connections
- Meets environmental, health, and safety requirements

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TECHNICAL INFORMATION

MATERIAL

- Housing: High temperature thermoplastic, complies with UL 94V-0, Black colour
- Contact: Copper alloy, Selective Gold plated on contact area, 100µ min. Tin plated on soldering tail, 50µ min. Nickel under-plated overall
- Shell: Stainless Steel or Copper alloy

MECHANICAL PERFORMANCE

- Durability: Type A:10,000 cycles at 100 ± 50 cycles per hour. Per EIA 364-09
- Insertion Force: 44.1 N {4.5kgf} Max. Per EIA 364-13
- Withdrawal Force: Type A: 9.8 N {1.0kgf} Min/39.2 N {4.0kgf} Max. Per EIA 364-13

ELECTRICAL PERFORMANCE

- Low Level Contact Resistance: Initial 10 Ω max. Per EIA 364-23
- Contact Current Rating: 0.5 A Min. Per EIA-364-70A
- Dielectric Withstanding Voltage: 500V AC. Per EIA 364-20C

PACKAGING

- Tray / Tape and Reel

ENVIRONMENTAL

- Humidity: 4 cycles between +25 to +85°C, Relative Humidity 80% to 95%. Per EIA 364-31B
- Thermal Shock: 10 cycles between -55°C to +85°C. Per EIA 364-32C

SPECIFICATIONS

- Amphenol Product Specification: PS-7393

TARGET MARKETS/APPLICATIONS



Telecom/Datacom Equipment



Test Card and Card Extenders
High End Computers
Servers



Test and Measurement Equipment



TV / Monitor
Set Top Box
Gaming

PART NUMBERS

Part Description	HDMI ID	Orientation	Tail	Height	Center Height mm	Length	Plating	Flange	Packing	Remark
G45AA1902100B1EU		Right Angle	SMT	6.1	3.32	12.1	G/F	No	Tray	
G45AA1902100GJ2HR		Right Angle	SMT	6.13	3.55	12.2	G/F	No	Tray	
G45AA1902100H1HR		Right Angle	SMT	6.18	3.605	12.2	G/F	No	Tape & Reel	2 layers shell @ both sides
G45AA1902110GZ3HR		Right Angle	SMT	6.15	3.37	11.55	G/F	Yes	Tray	Screw Hole Height = 11.28mm
G45AA1907008HR		Upright	SMT	16.4	X	26.46	G/F	No	Tray	Tin plated With Mylar
G45AA19071083HR		Upright	SMT	16.4	X	26.46	G/F	No	Tray	Nickel plated With Mylar
G45AA1907108HR		Upright	SMT	16.4	X	26.46	G/F	No	Tray	Nickel plated W/O Mylar
G45AA1912110RH1HR	V	Right Angle	SMT	6.225	3.45	12.2	G/F	Yes	Tray	Screw Hole Height =8.8mm
G45AA19171083HR	V	Upright	SMT	16.4	X	26.46	15µin-Gold	No	Tray	Nickel plated With Mylar
G45AA1922110B1EU	V	Right Angle	SMT	6.1	3.32	12.1mm	30µin-Gold	Yes	Tray	Screw Hole Height =7.34mm
G45AA1922110GZ3HR		Right Angle	SMT	6.15	3.37	11.55	30µin-Gold	Yes	Tray	Screw Hole Height = 11.28mm
G45AA19271083HR		Upright	SMT	16.4	X	26.46	30µin-Gold	No	Tray	Nickel plated With Mylar

Find part number details using the search box on www.amphenol-cs.com