Premium Optic DVI – HDMI AOC Cable

Descriptions

DVI to HDMI AOC product is a hybrid active optical cable (AOC), it comes with high performance, low power consumption and low cost using optical fiber, to replace copper wire as the high-speed signal transmission medium, It can perfectly transmit HD image over 100 meters. Compared with the traditional copper wire, DVI to HDMI AOC is much longer, softer, more slim with better signal quality and perfect EMI/EMC feature.

Key Features

- Long distance transmission, over 100 meters
- Support up to 4K@30Hz, 1080P@60Hz
- Program and store monitor's EDID information inside of source connector
- Thinner, lighter and softer than conventional copper cable.

DVI to HDMI 2.0 AOC

- No radiation, and highly resistant with EMI
- Data transfer rates up to 10.2 Gbps
- Request no external USB power supply

Applications

- Digital Signage
- LED signboards in streets and in stadiums
- Medical Imaging Equipment
- Airplane On-board Video System
- Home Theater
- Blue-ray, 3D video, Projector, Set-up box, DVR, Game Consoles and Computer
- TV Broadcast Station
- Conference Room Video Equipment
- Security systems

Specifications

1. Absolute Maximum Ratings

Parameter	Symbol	Min.	Typical	Max.	Unit
Supply Voltage	VCC	-0.5		6	V
Storage Temperature	Tstg	-20		70	℃
Relative Humidity	RH	5		85	%
Electrostatic Discharge Immunity (Air:8kV, Contact:6kV)		B			Class

2. Recommended Characteristics

Parameter	Symbol	Min.	Typical	Max.	Unit
Supply Voltage	VCC	4.8	5	5.3	V
Operating Temperature	I_{op}	0		50	℃

3. Electrical Characteristics

Parameter	Symbol	Min.	Typical	Max.	Unit
Opertaing Current	I_{op}	35	50	56	mA
Power Consumption	P_o	0.18	0.25	0.28	W
TMDS Differential Input Voltage	V_{ID}	400		1600	mV
TMDS Differential Output Voltage	V_{OD}	200	300	400	mV
TMDS Data Bit Rate		250		1650	Mbps

4. Physical Characteristics

Parameter	Value	Unit
Cable Dimensions(WXH)	4.5(±0.2)	mm
Cable Color	Black	-
Optical Fiber	Multi-mode fiber	um
Copper Wire	30AWG*2C+28AWG*3C+26AWG*1C+24AWG*1	-
Cable Material	PVC	-
Connector Pull Strength	15	Kg
Compression Load Resistance	50	Kg
Minimum Bending Radius	40	mm
Case Material	Zinc Alloy Metal	-

5. DVI Pin Description

PIN	Symbol	Functional Description	PIN	Symbol	Functional Description
1	Data2-	Data channel 2 negative	13	-	N.C.
2	Data2+	Data channel 2 positive	14	+5V	DC+5V
3	Data2 shield	Data channel 2 shield	15	GND	GND
4	-	N.C.	16	HPD	Hot plug detector
5	-	N.C.	17	Data0-	Data channel 0 negative
6	SCL	DDC clock	18	Data0+	Data channel 0 positive
7	SDA	DDC data	19	Data0 shield	Data channel 0 shield
8	-	N.C.	20	-	N.C.

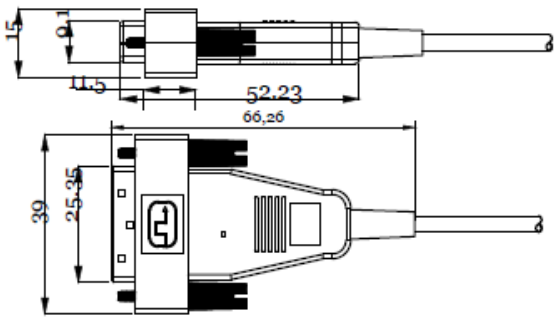
9	Data1-	Data channel 1 negative	21	-	N.C.
10	Data1+	Data channel 1 positive	22	Clock shield	Clock shield
11	Data1 shield	Data channel 1 shield	23	Clock+	Clock channel positive
12	-	N.c.	24	Clock-	Clock channel negative

6. HDMI Pin Description

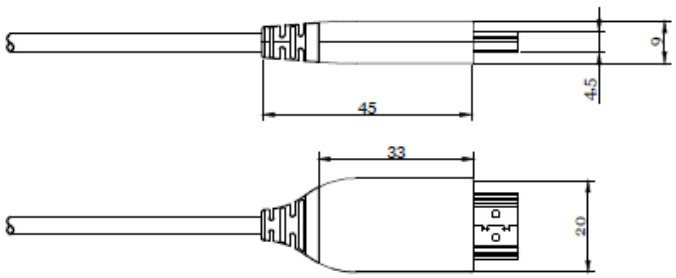
PIN	Function	PIN	Function
1	T.M.D.S. Data 2+	11	TMDS Clock Shield
2	T.M.D.S. Data 2 Shield	12	TMDS Clock-
3	T.M.D.S. Data 2-	13	CEC
4	T.M.D.S. Data 1+	14	Utility
5	T.M.D.S. Data 1 Shield	15	SCL
6	T.M.D.S. Data 1-	16	SDA
7	T.M.D.S. Data 0+	17	DDC/CEC Ground
8	T.M.D.S. Data 2 Shield	18	+5V Power
9	T.M.D.S. Data 0-	19	Hot Plug Detect
10	TMDS Clock+		

Installation

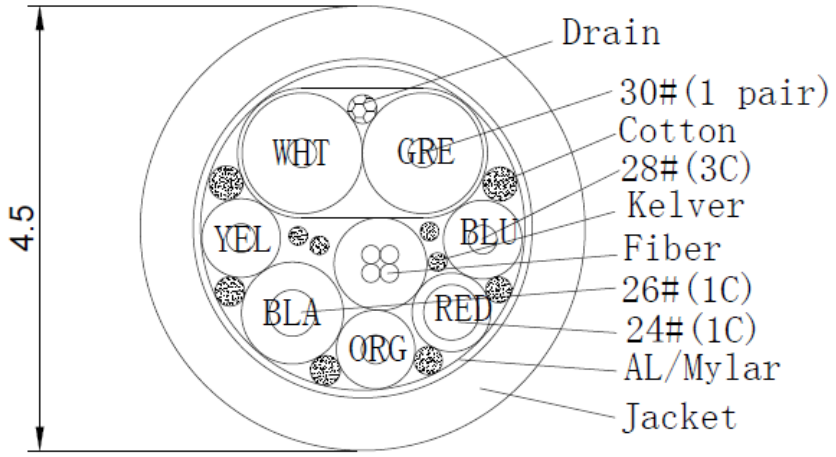
To Source



To Sink



Hybrid Cable Profile



Partnumbers

Description	Part number
PREMIUM OPTIC DVI-D 24+1 - HDMI 2.0 CABLE 10M	HDM1924110OP
PREMIUM OPTIC DVI-D 24+1 - HDMI 2.0 CABLE 15M	HDM1924115OP
PREMIUM OPTIC DVI-D 24+1 - HDMI 2.0 CABLE 20M	HDM1924120OP
PREMIUM OPTIC DVI-D 24+1 - HDMI 2.0 CABLE 30M	HDM1924130OP
PREMIUM OPTIC DVI-D 24+1 - HDMI 2.0 CABLE 40M	HDM1924140OP
PREMIUM OPTIC DVI-D 24+1 - HDMI 2.0 CABLE 50M	HDM1924150OP

Packing Details

10PCS/CARTON
For 10M to 60M

The Spool

Inner Box