

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0687830004

Status:

Active

Overview:

displayport

Description:

DisplayPort*-to-DisplayPort* Cable Assembly with Latches, 15.0m (49.21') Length, AWG28 Thin

Documents:

Drawing (PDF)

RoHS Certificate of Compliance (PDF)

General

Product Family

Cable Assemblies

Series

68783

Connector to Connector

DisplayPort* Both Ends

Overview

displayport

Product Name

DisplayPort*

Physical

Cable Length

15.0m (49.21')

Circuits (Loaded)

20

Color - Resin

Black

Gender

Male-Male

Lock to Mating Part

Yes

Material - Metal

Brass, Stainless Steel

Material - Plating Mating

Gold

Material - Plating Termination

Tin

Material - Resin

ABS Alloy, High Temperature Thermoplastic

Packaging Type

Bag

Pitch - Mating Interface (in)

0.039 In

Pitch - Mating Interface (mm)

1.00 mm

Plating min: Mating (µin)

32

Plating min: Mating (µm)

0.8

Plating min: Termination (µin)

80

Plating min: Termination (µm)

2

Single Ended

No

Termination Interface: Style

Surface Mount

Waterproof / Dustproof

No

Wire Insulation Diameter

N/A

Wire Size AWG

28

Wire/Cable Type

Round

Electrical

Current - Maximum per Contact

0.5A

Impedance

100 ohms

Shield Type

Full Shield

Shielded

Yes

Voltage - Maximum

40V

Material Info

Reference - Drawing Numbers

Packaging Specification

PK-68783-004

Sales Drawing

SD-68783-004

*DisplayPort is a Trademark of VESA



image - Reference only

Series

EU RoHS
ELV and RoHS
Compliant
REACH SVHC
Not Reviewed
Halogen-Free
Status
Not Reviewed

China RoHS



Need more information on product environmental compliance?

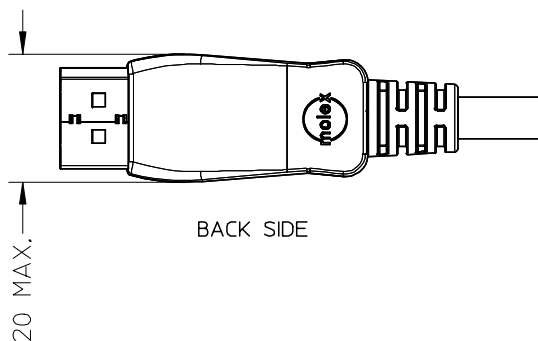
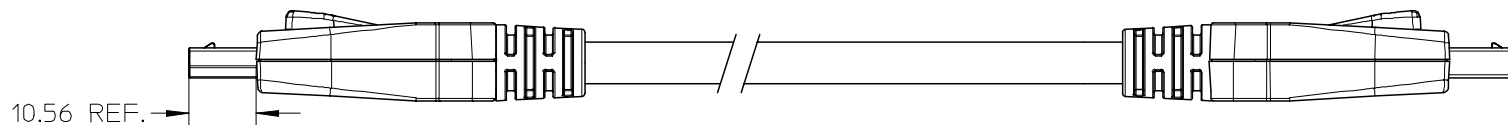
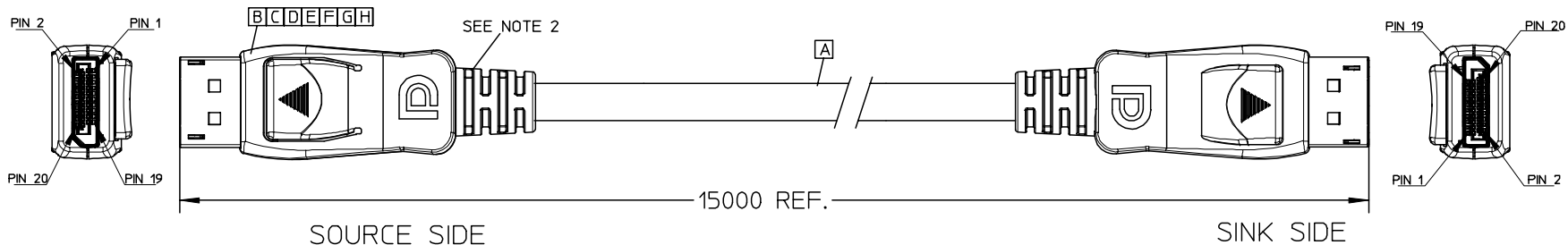
Email productcompliance@molex.com
For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

Search Parts in this Series
68783Series

Mates With
47272 DisplayPort* Receptacle

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BACK SIDE

H	COVER-UP WITH LATCH	47271-0004		2
G	COVER-DOWN	47271-0005		2
F	LATCH 2	47271-2006		2
E	LATCH 1	47271-1006		2
D	INNER-SHELL-LOWER	47271-1009		2
C	INNER-SHELL-UPPER WITH LATCH	47271-1008		2
B	PLUG SUB-ASS'Y CONN.	47271-0011		2
A	AWG28 CABLE OD=6.8mm		15M ref.	1
ITEM	DESCRIPTION		LENGTH	QTY.

ENTER DESCRIPTION
EC NO: DG2007-0075
DRWN: JLIU13
CHKD: BLAU
APPR: BLAU
REV

QUALITY SYMBOLS
=0
=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± ---	± ---
1 PLACE	± ---	± ---
ANGULAR ± ---°		

DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONS

	DIMENSION STYLE MM ONLY	SCALE ---	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION
	DRAWN BY JL IU13	DATE 2006/11/28	TITLE AWG28 15M CABLE ASS'Y	
	CHECKED BY BLAU	DATE 2006/11/28		
	APPROVED BY BLAU	DATE 2006/11/28		
			 MOLEX INCORPORATED	
	MATERIAL NO. 68783-0004	DOCUMENT NO. SD-68783-004		SHEET NO. 1 OF 2
SIZE A4	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

WIRE DIAGRAM:

SHELL		OVERALL BRAID	SHELL	
PIN 20	PWR	GREEN	PIN 20	PWR
PIN 19	Re-PWR	ORANGE	PIN 19	Re-PWR
PIN 18	HPD	YELLOW	PIN 18	HPD
PIN 17	AUX(n)	WHITE GND	PIN 17	AUX(n)
PIN 16	GND		PIN 16	GND
PIN 15	AUX(p)		PIN 15	AUX(p)
PIN 14	GND	RED	PIN 14	GND
PIN 13	GND	BROWN	PIN 13	GND
PIN 12	ML3(n)	WHITE	PIN 1	ML3(n)
PIN 11	GND	DRAIN	PIN 2	GND
PIN 10	ML3(p)	WHITE	PIN 3	ML3(p)
PIN 9	ML2(n)	WHITE DRAIN	PIN 4	ML2(n)
PIN 8	GND		PIN 5	GND
PIN 7	ML2(p)		PIN 6	ML2(p)
PIN 6	ML1(n)	WHITE DRAIN	PIN 7	ML1(n)
PIN 5	GND		PIN 8	GND
PIN 4	ML1(p)		PIN 9	ML1(p)
PIN 3	ML0(n)	WHITE DRAIN	PIN 10	ML0(n)
PIN 2	GND		PIN 11	GND
PIN 1	ML0(p)		PIN 12	ML0(p)
SOURCE SIDE	Pin Description	WIRE COLOR	SINK SIDE	Pin Description

- NOTE:
1. THE PRODUCT MUST MEET RoHS COMPLIANCE.
 2. THE STRAIN RELIEF SHALL BE MOLD WITH BLACK PVC .

3. ELECTRICAL PERFORMANCE:
- DIELECTRIC STRENGTH: TEST VOLTAGE 300±30V DC FOR 0.01S NO BREAKDOWN
- INSULATION RESISTANCE: BETWEEN ADJACENT CONTACTS AND CONTACTS
TEST VOLTAGE 300±30V DC FOR 0.01S 20M ohms (min).
- ▽ DIFFERENTIAL IMPEDANCE: 100+/-10 FOR TERMINATION AREA
100+/-5 FOR CABLE AREA
- ▽ INTRA PAIR SKEW: 250ps MAX.
- ▽ INSERTION LOSS: f is given in GHz, f₀=0.825GHz

$$S_{21} [dB] = \begin{cases} 10 & : 0.01 \leq f \leq \frac{f_0}{3} \\ -12 \times \left(\frac{3f - f_0}{f_0} \right) & : \frac{f_0}{3} \leq f \leq 3f_0 \end{cases}$$

- ▽ RETURN LOSS: f is given in GHz, f₀=0.8GHz

$$RL_{min} [dB] = \begin{cases} 15 & : f \leq f_0 \\ 15 + 13 \times \log_{10} \left(\frac{f}{f_0} \times 1.25 \right) & : f_0 < f \leq 2f_0 \\ -5 + 13.56 \times \log_{10} \left(\frac{f}{f_0} \times 0.625 \right) & : 2f_0 < f \leq 4f_0 \end{cases}$$

- ▽ NEAR END CROSSTALK: f is given in GHz, f₀=0.8GHz

$$Isolation_{near} [dB] = \begin{cases} 26 & : 0 < f < f_0 \\ -26 - 15 \log_{10} \left(\frac{f}{f_0} \right) & : f_0 < f \leq 7f_0 \end{cases}$$

- ▽ FAR END CROSSTALK: <-26dB(100MHz~7GHz),
THE FAR END NOISE SHALL BE DEFINED IN FREQUENCY DOMAIN.

ENTER DESCRIPTION EC NO: DG2007-0075 DRWN: JLIU13 CHKD: BLAU APPR: BLAU			DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ▽=6	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
					mm	INCH	DRAWN BY JLIU13	DATE 2006/11/28	TITLE AWG28 15M CABLE ASS'Y					
4 PLACES					± ---	± ---								
3 PLACES					± ---	± ---	CHECKED BY BLAU	DATE 2006/11/28						
2 PLACES					± ---	± ---	APPROVED BY BLAU		DATE 2006/11/28	MOLEX MOLEX INCORPORATED				
1 PLACE					± ---	± ---								
					ANGULAR ± ---°			MATERIAL NO. 68783-0004		DOCUMENT NO. SD-68783-004		SHEET NO. 2 OF 2		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS								THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						