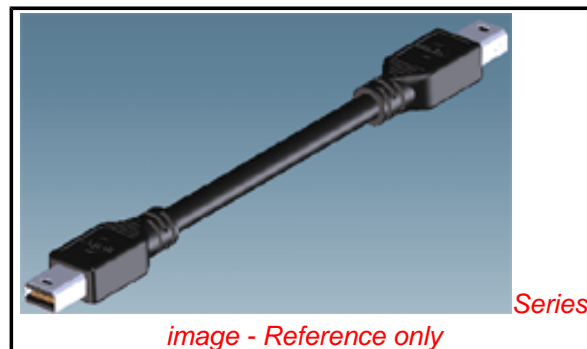


**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0687850006](#)  
**Status:** **Active**  
**Overview:** [displayport](#)  
**Description:** Mini DisplayPort\*(Plug)-to-Mini DisplayPort\*(Plug) Cable Assembly, 2.0m (6.56'), Lead-free

**Documents:**

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Product Specification PS-68785-0004 \(PDF\)](#)



**General**

Product Family	Cable Assemblies
Series	<a href="#">68785</a>
Connector to Connector	Mini DisplayPort* Both Ends
Overview	<a href="#">displayport</a>
Product Name	DisplayPort*, Mini DisplayPort*

**Physical**

Cable Length	2.0m (6.56' )
Circuits (Loaded)	20
Color - Resin	Black
Gender	Male-Male
Lock to Mating Part	Yes
Material - Metal	Copper Alloy
Material - Plating Mating	Gold
Material - Resin	High Temperature Thermoplastic
Packaging Type	Carton
Pitch - Mating Interface (in)	0.024 In
Pitch - Mating Interface (mm)	0.60 mm
Single Ended	No
Waterproof / Dustproof	No
Wire Insulation Diameter	N/A
Wire/Cable Type	Round

**Electrical**

Current - Maximum per Contact	.5A
Impedance	100 ohms
Shield Type	Full Shield
Shielded	Yes
Voltage - Maximum	40V AC

**Material Info**

**Reference - Drawing Numbers**

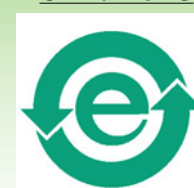
Product Specification	PS-68785-0004
Sales Drawing	SD-68785-0004

Mini DisplayPort\* and DisplayPort\* are trademarks or registered trademarks of VESA

**EU RoHS**

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

**China RoHS**



**Need more information on product  
environmental compliance?**

Email [productcompliance@molex.com](mailto: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**

[68785Series](#)

**Mates With**

[105081](#) Mini DisplayPort\* Receptacles

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REVISIONS				DESCRIPTION	CHANGER
ECN NO	DATE	REVISION			
	SEP 07,09	A	INITIAL RELEASE		JOE XIE

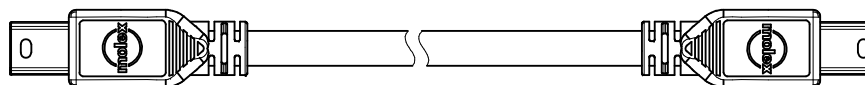
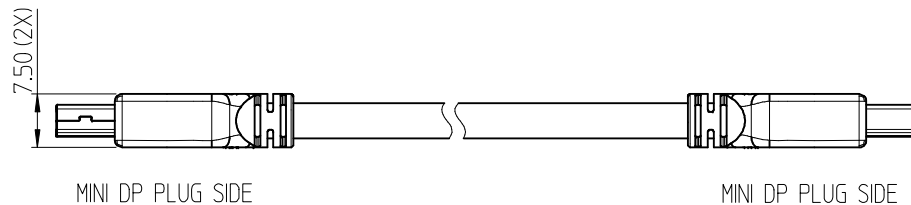
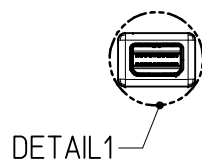
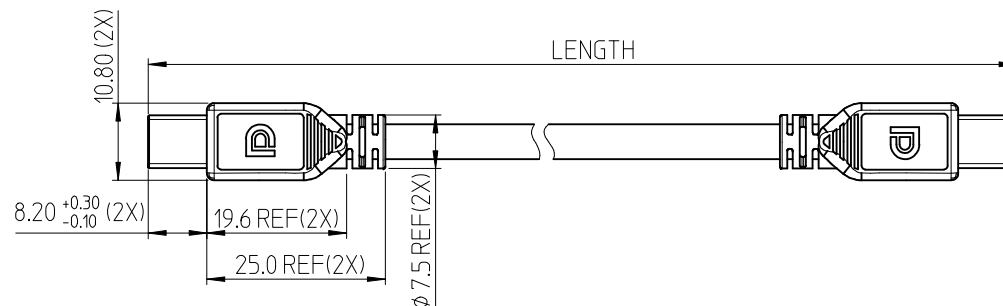
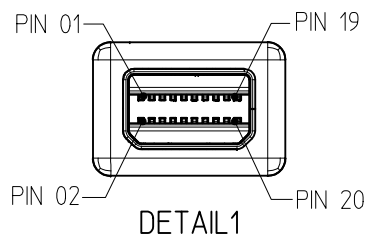


TABLE-1:

687850006	2000±40
687850005	1500±30
687850004	1000±20
PART NO.	LENGTH

EC NO: DG2010-0085 2009/11/02 DRWN: YOXIE 2009/11/03 CHKD: CLU0 APPR: CLU0 2009/11/03	DESCRIPTION A	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
				mm	INCH	DRAWN BY	DATE	TITLE	MINIDP PLUG TO MINIDP PLUG CABLE ASSY
			4 PLACES	± ---	± ---	CHECKED BY	DATE		
			3 PLACES	± ---	± ---	APPROVED BY	DATE		
			2 PLACES	± 0.25	± ---				
			1 PLACE	± 0.5	± ---				
			ANGULAR ± 3 °		MATERIAL NO.		MOLEX INCORPORATED		
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE-1		DOCUMENT NO.		SHEET NO.
							SD-68785-0004		1 OF 2
							THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

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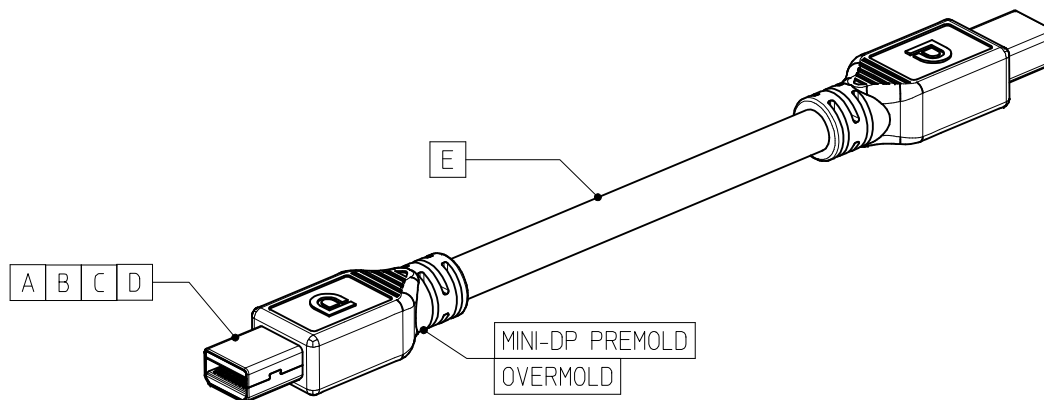
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## WIRING DIAGRAM

MINI DP PLUG SOURCE SIDE	FUNCTION	MINI DP PLUG SINK SIDE
PIN 01	GROUND	PIN 08
PIN 03	ML0+	PIN 12
PIN 05	ML0-	PIN 10
PIN 07	GROUND	PIN 13
PIN 09	ML1+	PIN 17
PIN 11	ML1-	PIN 15
PIN 13	GROUND	PIN 07
PIN 15	ML2+	PIN 11
PIN 17	ML2-	PIN 09
PIN 19	GROUND	PIN 19
PIN 02	HOT PLUG DETECT	PIN 02
PIN 04	CONFIG 1	PIN 04
PIN 06	CONFIG 2	PIN 06
PIN 08	GROUND	PIN 01
PIN 10	ML3+	PIN 05
PIN 12	ML3-	PIN 03
PIN 14	GROUND	PIN 14
PIN 16	AUX+	PIN 16
PIN 18	AUX-	PIN 18
PIN 20	NO CONNECTION	PIN 20
SHELL	GROUND	SHELL



## NOTES:

## 1. MATERIALS:

OVERMOLD: PVC, COLOR BLACK, UL94-V0.  
 CABLE: PVC JACKET, BLACK, UL94-VW-1.  
 HOUSING: HIGH TEMPERATURE THERMOPLASTIC.  
 TERMINAL: COPPER ALLOY, GOLD PLATING, NICKEL UNDERPLATE.  
 SHELL: COPPER ALLOY, NICKEL PLATING.

## 2. ELECTRICAL PROPERTY:

3.1 APPLIED VOLTAGE RATING: 40V AC (RMS).  
 3.2 CURRENT RATING: 0.5A.  
 3.3 DIELECTRIC WITHSTAND: 300V.  
 3.4 INSULATION RESISTANCE: 100M OHM (UNMATING),  
 10M OHM (MATING).

## 3. OPERATION TEMPERATURE: -20°C TO +80°C.

## 4. THE PRODUCT COMPLIANT TO MOLEX ES-40000-5016.

ITEM	DESCRIPTION	MATERIAL	USAGE
E	MINI DP CABLE	---	---
D	BOTTOM SHELL FOR MINI DP PLUG	COPPER ALLOY	2 PCS
C	TOP SHELL FOR MINI DP PLUG	COPPER ALLOY	2 PCS
B	SHIELD SHELL FOR MINI DP PLUG	COPPER ALLOY	2 PCS
A	SUB-ASSEMBLY FOR MINI DP PLUG	---	2 PCS

EC NO: DG2010-0085 2009/11/02 DRWN:YOXIE CHKD:CLU0 APPR:CLU0 2009/11/03	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION												
		▼=0 ▽=0	<table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.25</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.5</td> <td>± ---</td> </tr> </tbody> </table> ANGULAR ± 3 °		mm	INCH		4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.25	± ---	1 PLACE	± 0.5	± ---
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