

Series image - Reference only

EU RoHS

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China RoHS



**Search Parts in this Series**

88759 Series

**Part Number:** **0887685400**

**Status:** **Active** **Overview:** **DMS-59®**

**Description:** 1.27mm (.050") Pitch DMS-59® to DVI-I(F)+VGA(F) Adapter Cable Assembly, 0.20m (7.87") Length

### General

Product Family	Cable Assemblies
Series	<u>88759</u>
Connector to Connector	DMS-59™ to DVI-/VGA
Overview	<u>DMS-59®</u>
Product Name	DMS59®

### Physical

Cable Length	0.20m (7.87")
Circuits (Loaded)	59
Color - Resin	Black (D2)
Color - Resin	Natural
Gender	Male-Female
Lock to Mating Part	Yes
Material - Metal	Aluminum
Material - Metal	Phosphor Bronze
Material - Metal	Steel
Material - Plating Mating	Gold
Material - Plating Mating	n/a
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Material - Resin	Low Density Polyethylene
Packaging Type	Bag
Pitch - Mating Interface (in)	0.050 In
Pitch - Mating Interface (mm)	1.27 mm
Plating min: Mating (uin)	2
Plating min: Mating (uin)	30

Plating min: Mating (uin)	75
Plating min: Mating (um)	0.05
Plating min: Mating (um)	0.75
Plating min: Mating (um)	1.875
Plating min: Termination (uin)	100
Plating min: Termination (uin)	150
Plating min: Termination (um)	2.5
Plating min: Termination (um)	3.75
Single Ended	No
Termination Interface: Style	N/A
Termination Interface: Style	Through Hole
Wire Insulation Diameter	N/A
Wire Size AWG	32
Wire/Cable Type	Round

### Electrical

Current - Maximum	1.000 Amp
Impedance	100 ohms
Shielded	Yes
Voltage - Maximum	30VAC

### Material Info

### Reference - Drawing Numbers

Sales Drawing	SD-88744-098
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7 6 5 4 3 2 1

E

D

C

B

A

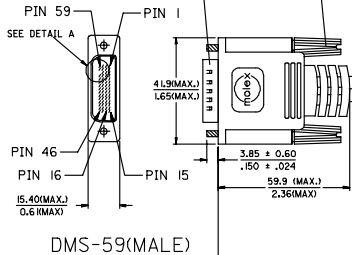
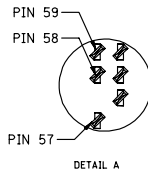
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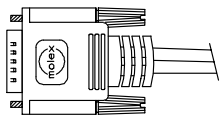
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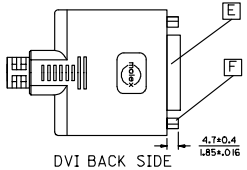
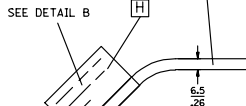
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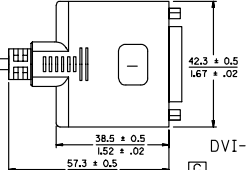
DMS-59(MALE)



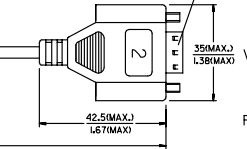
BACK SIDE



DVI BACK SIDE

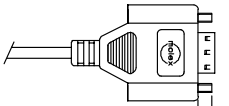


DVI-I(FEMALE)

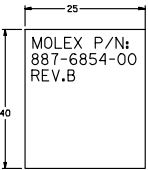


VGA 2

VGA(FEMALE)



BACK SIDE



DETAIL B

ENTER DESCRIPTION EC NO: DG2006-0186 DRW: PDAI CHKD: CHYKD APPR: KAN	DESCRIPTION 2006/03/09 2006/03/09 2006/03/10	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		$\nabla=0$ $\nabla=0$	mm	INCH	MM/IN	---	METRIC		
		4 PLACES	±---	±---	PDAI	DATE	TITLE DMS59(M) TO DVI-I(F)+ VGA(F) ADAPTE CABLE		
		3 PLACES	±---	±---	CHECKED BY	DATE			
2 PLACES	±---	±---	ZXDENG	DATE	MOLEX INCORPORATED				
1 PLACE	±---	±---	APPROVED BY	DATE					
		ANGULAR	±---	BORON	DATE	MATERIAL NO. 887685400 DOCUMENT NO. SD-88744-098		SHEET NO. 1 OF 2	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SIZE A4			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

ib\_frame\_A4\_P\_ME\_T Rev. D 2004/04/02

6 5 4 3 2 1

7 6 5 4 3 2 1

WIRING DIAGRAM:

SHIELD	SHIELD	GROUND
C5	PIN 1,4,5,9	GROUND(RED, BLUE, GREEN)
C4	PIN 56	VGA1_HSYNC
C3	PIN 3	VGA1_BLUE
C2	PIN 58	VGA1_GREEN
C1	PIN 2	VGA1_RED
PIN 23	PIN 31	DVII_TXC+
PIN 24	PIN 32	DVII_TXC-
PIN 22	PIN 57	DVII_TXC RTN
PIN 19	PIN 33	DVII_TX0 RTN
PIN 18	PIN 29	DVII_TX0+
PIN 17	PIN 30	DVII_TX0-
PIN 16	PIN 36	DVII_HPD
PIN 15	PIN 54	GROUND
PIN 14	PIN 5	+5V
PIN 11	PIN 34	DVII_TX1 RTN
PIN 10	PIN 27	DVII_TX1+
PIN 9	PIN 28	DVII_TX1-
PIN 8	PIN 55	VGA1_VSYNC
PIN 7	PIN 7	DVII_ODC_DATA
PIN 6	PIN 6	DVII_ODC_CLOCK
PIN 3	PIN 35	DVII_TX2 RTN
PIN 2	PIN 25	DVII_TX2+
PIN 1	PIN 26	DVII_TX2-
DVI.I	DMS-59	CABLE FUNCTION

NOTE: 1. OVERMOLD SPECIFICATION

- 1.1 DMS-59 BOOT MOLDED WITH SNOW WHITE PVC RESIN, UL94V-0.
- 1.2 VGA BOOT MOLDED WITH BLUE PVC RESIN, UL94V-0.
- 1.3 DVI.I BOOT MOLDED WITH SNOW WHITE PVC RESIN, UL94V-0.
2. MECHANICAL SPECIFICATION
  - ▽ 2.1 CABLE SHOULD STAND THE PULL FORCE 89-111N FOR 30 SECONDS WITH NO VISIBLE TERMINATION DAMAGE.
  - 2.2 CABLE SHOULD PASS THE FLEX TEST IN 100 CYCLES AT EACH OF PLANES, PER EIA 364-41, CONDITION I.
3. CABLE ASSEMBLY ELECTRICAL SPECIFICATION
  - ▽ 3.1 HI-POT VOLTAGE: 300VDC FOR 10ms.
  - ▽ 3.2 INSULATION RESISTANCE: 20 MEGA Ohms PER MIN.
  - ▽ 3.3 CONNECTION RESISTANCE: 2 Ohms MAX.
  - ▽ 3.4 DIFFERENTIAL LINES CHARACTERISTIC IMPEDANCE: 100±7 Ohms. @TDR 200 PSEC RISE TIME.
  - ▽ 3.5 COAXIAL LINES CHARACTERISTIC IMPEDANCE: 75±10% Ohms @TDR 200 PSEC RISE TIME.
- 3.6 WRAP COPPER TAPE OVER BRAID, THEN CRIMP THE METAL CAN ON COPPER TAPE WITH 360°.
4. CONNECTOR PLATING: GOLD FLASH PLATING.
5. SCREW SPEC.: 4-40 UNC.

SHIELD	SHIELD	GROUND
PIN 15	PIN 10	VGA_SCL
PIN 14	PIN 51	VGA_VSYNC
PIN 13	PIN 50	VGA_HSYNC
PIN 12	PIN 9	VGA_SDA
PIN 10	PIN 52	GROUND(SYNCS)
PIN 9	PIN 11	+5V
PIN 8	PIN 12	GROUND(BLUE)
PIN 7	PIN 46	GROUND(GREEN)
PIN 6	PIN 15	GROUND(RED)
PIN 5	PIN 49	GROUND(ANALOG)
PIN 3	PIN 13	VGA_BLUE
PIN 2	PIN 47	VGA_GREEN
PIN 1	PIN 14	VGA_RED
VGA2	DMS-59	CABLE FUNCTION

MATERIAL LIST:

H	LABEL	I
G	VGA D-SUB CONNECTOR(FEMALE)	1
F	DVI(F) JACK SCREW	2
E	DVI.I FEMALE CONNECTOR	1
D	LFH THUMB SCREW 4-40 UNC	2
C	DMS-59 PLUG ASSY(INATURE)	1
B	DVI-A/D CABLE BLACK	1
A	DVI ANALOG CABLE BLACK	1
ITEM	DESCRIPTION	QTY.

ENTER DESCRIPTION EC NO: DG2006-0186 DRWN: PDAI CHKD: 2006/03/09 APPR: KAN 2006/03/10	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
				MM/IN	---	METRIC		
				DRAWN BY	DATE	TITLE		
				DATE	DATE	DMS59(M) TO DVI-I(F)+ VGA(F) ADAPTE CABLE		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		CHECKED BY	DATE	MOLEX INCORPORATED		
				APPROVED BY	DATE	SHEET NO.		
				BORON	2006/03/07	2 OF 2		
				MATERIAL NO.	DOCUMENT NO.			
				887685400	SD-88744-098			
				THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

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Rev. D 2004/04/02

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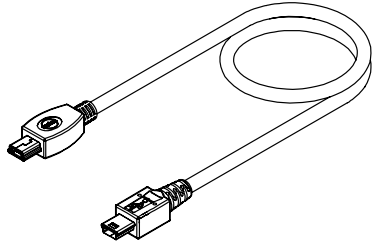
# Universal Serial Bus (USB) On-The-Go (OTG) Shielded I/O Cable Assembly

**88732**

**Standard USB A to Mini B**

**88753**

**Mini A to Mini B**



### Features and Benefits

- Approximately 1/8 the size of standard USB-B connectors
- Connector-to-connector polarization ensures proper mating
- Full shield provides EMI/RFI protection
- Meets USB 2.0 specifications
- Compact and lightweight design meets various portable and mobile equipment needs
- Rugged durability up to 5,000 cycles
- Other cable lengths and custom designs available

### Reference Information

Product Specification: PS-87525  
Packaging: Bag or custom-specified  
Mates With: USB A, Mini AB and Mini B receptacle  
Designed In: Millimeters

### Electrical

Voltage: 30V  
Current: 1.0A  
Contact Resistance: 50 milliohms max.  
Dielectric Withstanding Voltage: 100V AC/min.  
Insulation Resistance: 100 Megohms min.

### Mechanical

Mating Force: 35N max.  
Unmating Force: 10N min.  
Durability: USB A—1500 cycles  
Mini A and Mini B—5000 cycles

### Physical

Contact: Copper Alloy  
Plating: Contact Area—0.75µm (30µ") min. Gold  
Underplating: Nickel  
Wire Gauge: 28 AWG  
Operating Temperature: 0 to +50°C

Cable Assembly Lengths (mm)	Order No.	Description	Lead-free
800 White	<a href="#">88732-8510</a>	USB A to Mini B, USB 1.1	Yes
800 Black	<a href="#">88732-8512</a>		
1000 White	<a href="#">88732-8610</a>		
1000 Black	<a href="#">88732-8612</a>		
1500 White	<a href="#">88732-8710</a>		
1500 Black	<a href="#">88732-8712</a>		
1800 White	<a href="#">88732-8810</a>		
1800 Black	<a href="#">88732-8812</a>		
2000 White	<a href="#">88732-8910</a>		
2000 Black	<a href="#">88732-8912</a>		
800 White	<a href="#">88732-8500</a>	USB A to Mini B, USB 2.0	Yes
800 Black	<a href="#">88732-8502</a>		
1000 White	<a href="#">88732-8600</a>		
1000 Black	<a href="#">88732-8602</a>		
1500 White	<a href="#">88732-8700</a>		
1500 Black	<a href="#">88732-8702</a>		
1800 White	<a href="#">88732-8800</a>		
1800 Black	<a href="#">88732-8802</a>		
2000 White	<a href="#">88732-8900</a>		
2000 Black	<a href="#">88732-8902</a>		

Cable Assembly Lengths (mm)	Order No.	Description	Lead-free
800 White	<a href="#">88753-8110</a>	USB Mini A to Mini B, USB 1.1	Yes
1000 White	<a href="#">88753-8210</a>		
1200 White	<a href="#">88753-8310</a>		
1500 White	<a href="#">88753-8410</a>		
1800 White	<a href="#">88753-8510</a>		
2000 White	<a href="#">88753-8610</a>		
800 White	<a href="#">88753-8100</a>	USB Mini A to Mini B, USB 2.0	Yes
800 Black	<a href="#">88753-8102</a>		
1000 White	<a href="#">88753-8200</a>		
1000 Black	<a href="#">88753-8202</a>		
1200 White	<a href="#">88753-8300</a>		
1200 Black	<a href="#">88753-8302</a>		
1500 White	<a href="#">88753-8400</a>		
1500 Black	<a href="#">88753-8402</a>		
1800 White	<a href="#">88753-8500</a>		
1800 Black	<a href="#">88753-8502</a>		
2000 White	<a href="#">88753-8600</a>		
2000 Black	<a href="#">88753-8602</a>		

I/O Products

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# DMS-59™ Shielded I/O Cable Assembly

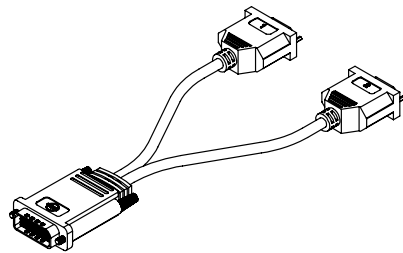
**88759**

**DMS-59 To Dual VGA**

**DMS-59 To VGA/DVI Analog**

**DMS-59 To Dual DVI Analog**

**DMS-59 To Dual DVI Digital**



### Features and Benefits

- Keyed (void pin number 58) to ensure exclusive mating of receptacle with DMS-59 cable assemblies
- Proven LFH™ (Low Force Helix) high-cycle contact interface system for reliable system life
- Cable assemblies are available in a variety of lengths and configurations

### Reference Information

Product Specification: PS-88768-5300  
Packaging: Bag  
Mates With: DMS-59 receptacle  
Designed In: Millimeters

### Electrical

Voltage: 30V  
Current: 1.0A  
Contact Resistance: 50 milliohms max.  
Dielectric Withstanding Voltage: 500V DC  
Insulation Resistance: 100 Megohms min.

### Mechanical

Insertion Force: 53N max.  
Withdraw Force: 22N min.  
Durability: 5000 cycles

### Physical

Housing: White glass-filled LCP, UL 94V-0  
Contact: Copper Alloy  
Plating: Contact Area—0.75µm (30µ") min. Gold  
Underplating: Nickel  
Wire Gauge: 30 AWG  
Operating Temperature: 0 to +80°C

Cable Length (mm)	Order No.	Cable Assembly Description	Lead-free
200	<a href="#">88768-5200</a>	DMS-59-Male to Two VGA-Female Cable Assembly	Yes
	<a href="#">88768-5300</a>	DMS-59-Male to Two DVI-I-Female Cable Assembly	
	<a href="#">88768-5400</a>	DMS-59-Male to VGA-Female + DVI-I-Female Cable Assembly	
2000	<a href="#">88768-5500</a>	DMS-59-Male to Two DVI-D-Male Single Link Cable Assembly	
3000	<a href="#">88768-5510</a>		

