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Jameco Part Number 1977278



PRODUCT SPECIFICATION

DMS-59tm

(DUAL MONITOR SYSTEM-59 CIRCUITS)

1.0 SCOPE

This Product Specification covers the 1.27 mm (.050 inch) pitch gold plated connector series, consisting of a right angle printed circuit board (PCB) receptacle and a vertical wire to board plug.

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT NAME AND SERIES NUMBER(S)

Product Name / Product Series

DMS-59tm Right Angle Receptacle / 75134 Series

DMS-59tm Vertical Plug / 75135 Series

2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

(See sales drawings SD-75134-001 for the right angle receptacle and SD-75135-001 for the vertical plug for information on dimensions, materials, platings, and markings.)

2.3 SAFETY AGENCY APPROVALS

UL Recognition: E29179, Volume 10, Section 12.

CSA Certification: LR19980.

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

(See sales drawings SD-75134-001 for the right angle receptacle, SD-75135-001 for the vertical plug, and other sections of this Specification for the necessary referenced documents and specifications.)

4.0 RATINGS

4.1 VOLTAGE

40 Volts AC (RMS)

4.2 CURRENT

3.0 Amps

4.3 TEMPERATURE

Operating: - 20°C to + 85°C

Nonoperating: - 20°C to + 85°C

REVISION: A	ECR/ECN INFORMATION: EC No: UCP2003-1934 DATE: 2002/10/21	TITLE: DMS-59tm (DUAL MONITOR SYSTEM-59 CIRCUITS) 1.27/.050 PITCH	SHEET No. 1 of 5
DOCUMENT NUMBER: PS-75134-001	CREATED / REVISED BY: DMORGAN 02/10/21	CHECKED BY: BBARKER 02/10/21	APPROVED BY: SMILLER 02/10/21



PRODUCT SPECIFICATION

5.0 PERFORMANCE

5.1 ELECTRICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Contact Resistance	Bulk resistance measured between plug solder tails and receptacle solder tails per ANSI/EIA-364-23	20 milliohm maximum, initial per contact mated pair 10 milliohm maximum change from initial reading per contact mated pair
2	Shell Resistance	Bulk resistance measured between ground leg on receptacle shield and the plug cable braid. Test current=100mA; Test voltage=5 Volts DC open circuit maximum per ANSI/EIA-364-06A-83	50 milliohm maximum initial 50milliohm maximum change from initial reading
3	Insulation Resistance	Test voltage=500 Volts DC +/- 50 V Unmated and Unmounted per ANSI/EIA364-21, Method C	500 Megohms Minimum between adjacent contacts and contacts and shell
4	Dielectric Withstanding Voltage	Test voltage=500 Volts DC +/- 50 V Unmated and Unmounted per ANSI/EIA-364-20, Method C Barometric pressure of 15 psi	No flashover, No sparkover, No excess leakage, No Breakdown
5	Contact Current Rating	Maximum ambient= 55 degree C Maximum temperature change= 85 degree C per ANSI/EIA-364-70, TP-70	3.0 Amp maximum
6	T.M.D.S. Signals Time Domain Crosstalk: (FEXT)	Risetime = 330 pS (10%-90%) S:G Ratio = 2:1 Differential Measurement Specimen Environment Impedance = 100 ohm differential Source-sided receptacle connector mounted on a controlled impedance PCB fixture. (1) Driven pair and (1) victim pair. Per ANSI/EIA-364-90	5% Maximum
7	T.M.D.S. Signals Time Domain: Impedance	Risetime = 330 pS (10%-90%) S:G Ratio = 2:1 Differential Measurement Specimen Environment Impedance = 100 ohm differential Source-sided receptacle connector mounted on a controlled impedance PCB fixture. ANSI/EIA-364-108! Unexpected End of Formula	100 ohm +/- 15%

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PRODUCT SPECIFICATION

5.1 ELECTRICAL REQUIREMENTS (continued)

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
8	T.M.D.S. Signals Rise Time Degradation	S:G Ratio = 2:1 Differential Measurement Specimen Environment Impedance = 100 ohm differential Source-sided receptacle and load side plug connector mounted on a controlled impedance PCB fixture. Per ANSI/EIA-364-102	160 pS Maximum (Note : Converted bandwidth using $BW=0.35/t_{rise}$ yields 2.2 GHz)
9	Analog RGB Coaxial Signal Time Domain Impedance	Risetime = 700 pS (10%-90%) S:G Ratio = 1:1 Single-ended Measurement Specimen Environment Impedance = 75 ohm Single-ended Source-sided receptacle connector mounted on a controlled impedance PCB fixture. Per ANSI/EIA-364-108	75 ohm +/- 10%
10	Analog RGB Coaxial Signal Time Domain Crosstalk: (FEXT)	Risetime = 700 pS (10%-90%) S:G Ratio = 1:1 Single-ended Measurement Specimen Environment Impedance = 75 ohm Single-ended Source-sided receptacle connector mounted on a controlled impedance PCB fixture and the load side plug is terminated to semi-rigid coax. (1) Driven line and (1) victim line. Per ANSI/EIA-364-90	3% Maximum
11	Analog RGB Coaxial Signal Rise Time Degradation	S:G Ratio = 1:1 Single-ended Measurement Specimen Environment Impedance = 75 ohm Single-ended Source-sided receptacle connector mounted on a controlled impedance PCB fixture and the load side plug is terminated to semi-rigid coax. Per ANSI/EIA-364-102	140 pS Maximum (Note: Converted bandwidth using $BW=0.35/t_{rise}$ yields 2.5GHz)

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5.2 MECHANICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
12	Connector Mate and Unmate Forces	Mate and unmate connector (male to female) at a rate of 25 ± 6 mm (1 ± ¼ inch) per minute. Per ANSI/EIA-364-13	44.5 N (10.0 lbf) MAXIMUM insertion force & 9.8 N (2.2 lbf) MINIMUM and 39.1 N (8.8 lbf) MAXIMUM withdrawal force
13	Durability	Mate connectors up to 500 cycles for gold (noble) plating at a maximum rate of 100 cycles per hour prior to Environmental Tests. Per ANSI/EIA-09	10 milliohms MAXIMUM (resistance change from initial)
14	Vibration (Random)	15 minutes/axis Per ANSI/EIA 364-28, Condition III, Method 5A.	No discontinuities at 1 microsecond or longer (each contact) when continuity is tested per EIA-364-46
15	Shock (Mechanical)	Per ANSI/EIA 364-27, Condition A (specified pulse).	No discontinuities at 1 microsecond or longer (each contact) per EIA-364-46
16	Cable Flexing	100 cycles in each of 2 planes dimension X=3.7 x Cable Diameter Per ANSI/EIA 364-41, Condition I	No discontinuities greater than 1 microsecond allowed during flexing on contacts or shields per EIA-364-46 Dielectric Withstanding Voltage and Insulation Resistance tested per requirement of section 5.1
17	Thread Torque	Mounted to panel; Test to Failure; Tighten jackposts with torque gage until threads are stripped and jackpost turns freely	5.76 kgf cm (5.0 lbf in) Minimum

5.3 ENVIRONMENTAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
18	Thermal Shock	10 Cycles Mated/Unmated Per ANSI/EIA 364-32	Contact Resistance: 10 milliohm maximum change from initial per contact pair All samples to be mated Shell Resistance: 50 milliohm maximum change from initial Per EIA-364-23

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5.3 ENVIRONMENTAL REQUIREMENTS (continued)

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
19	Humidity (Cyclic)	ANSI/EIA 364-31, Conditions A and B Method III, omit 7A and 7B	Contact Resistance: 10 milliohm maximum change from initial per contact pair All samples to be mated Shell Resistance: 50 milliohm maximum change from initial per EIA-364-23
20	Thermal Aging	105 °C for 250 hours Mated per ANSI/EIA 364-17, Condition 4, Method A	Contact Resistance: 10 milliohm maximum change from initial per contact pair All samples to be mated Shell Resistance: 50 milliohm maximum change from initial per EIA-364-23
21	Temperature Rise	Per ANSI/EIA 364-70	30 °C maximum temperature rise
22	Resistance to Solder Heat	Dip Connector solder tails into solder for 10 seconds (solder temperature = 260 +/- 5 °C)	No Visual damage to insulator
23	Solderability	Per MIL-STD-202, Method 208	95% minimum coverage

6.0 PACKAGING

Parts shall be packaged to protect against damage during handling, transit and storage. See appropriate note in Sales drawings for packaging specification.

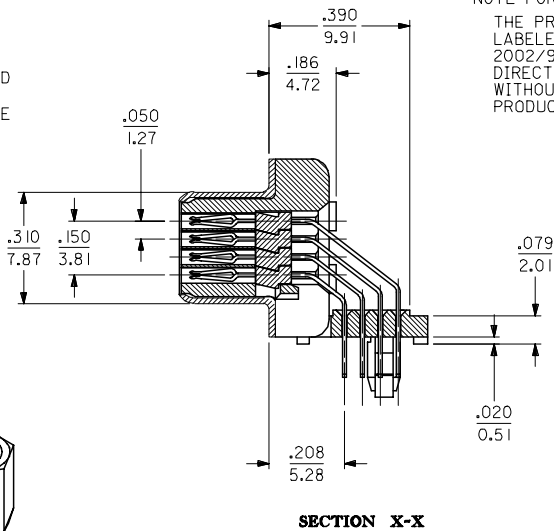
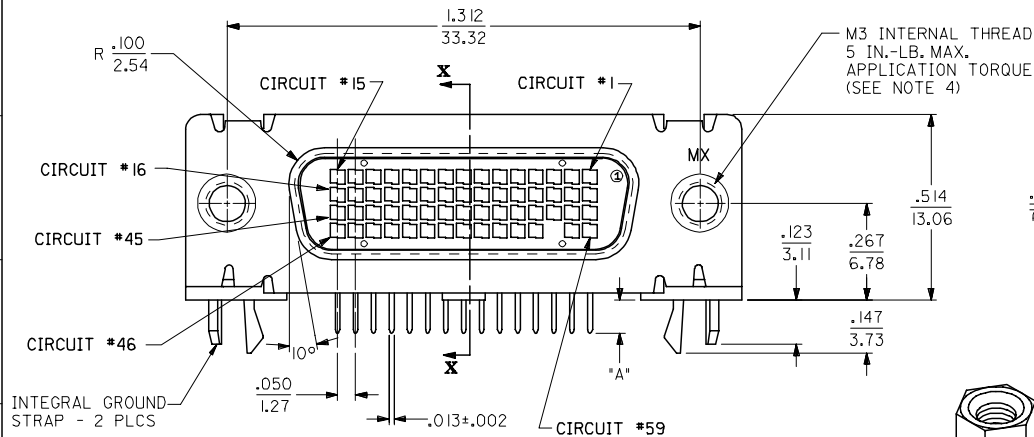
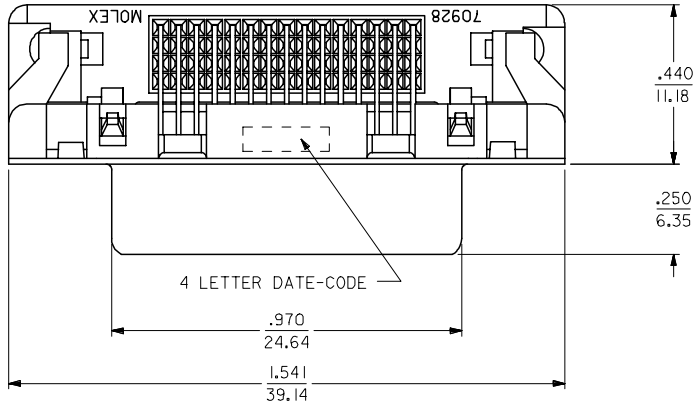
7.0 GAGES AND FIXTURES

Not-Applicable

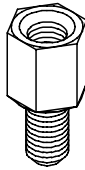
8.0 OTHER INFORMATION

REVISION: A	ECR/ECN INFORMATION: EC No: UCP2003-1934 DATE: 2002/10/21	TITLE: DMS-59™ (DUAL MONITOR SYSTEM-59 CIRCUITS) 1.27/.050 PITCH	SHEET No. 5 of 5
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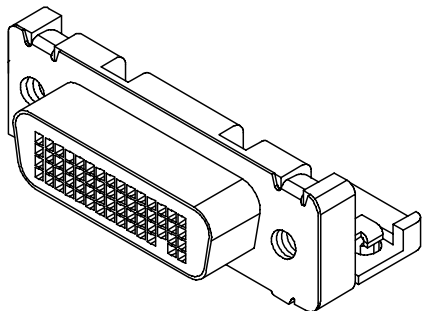
13	12	11	10	9	8	7	6	5	4	3	2	1
ITEM NUMBER	DIMENSION "A"	HEXAGONAL SCREWLOCKS PACKAGED WITH CONNECTORS	SCREWLOCK ITEM NUMBER (SEE SD-70982-****)	PACKAGED PER PACKAGING SPECIFICATION		NOTES:						
75134-1000	.092±.010/2.34±0.25	NO		PK-70873-0291		1) MATERIALS: HOUSING: GLASS FILLED LCP (LIQUID CRYSTAL POLYMER), UL94 V-0, COLOR NATURAL. STICK HOUSING: GLASS FILLED LCP (LIQUID CRYSTAL POLYMER), UL94 V-0, COLOR BLACK. TERMINALS: COPPER ALLOY. OUTER SHELL: DEEP DRAWN STEEL. HEXAGONAL SCREWLOCK: STEEL.						
75134-1001	.092±.010/2.34±0.25	YES	70982-1003; 4-40 INTERNAL THD	PK-70873-0686		2) PLATING : <u>TERMINAL</u> : SELECTIVE GOLD (Au) FLASH IN CONTACT AREA; THICKNESS= 2 TO 10 MICROINCHES/0.05 TO 0.25 MICROMETERS; SELECTIVE TIN (Sn) ALLOY IN THE PC TAIL AREA: THICKNESS=100 MICROINCHES/2.54 MICROMETERS MINIMUM; NICKEL (Ni) UNDERPLATE OVER ENTIRE PIN. <u>OUTER SHELL</u> : 150 MICROINCHES/3.81 MICROMETERS MINIMUM OF BRIGHT TIN OVER 50 MICROINCHES/1.27 MICROMETERS MINIMUM OF NICKEL OVER COPPER FLASH (OPTIONAL). 3) CONFORMS TO PRODUCT SPECIFICATION PS-75134-001. 4) THREAD GAGE MAY REQUIRE UP TO 1 INCH-POUND/0.113 NEWTON-METER OF TORQUE DURING GAGING PROCESS. 5) SEE CHART FOR PACKAGING. 6) PART COMPLIES WITH CLASS B OF COSMETIC SPECIFICATION PS-45499-002						



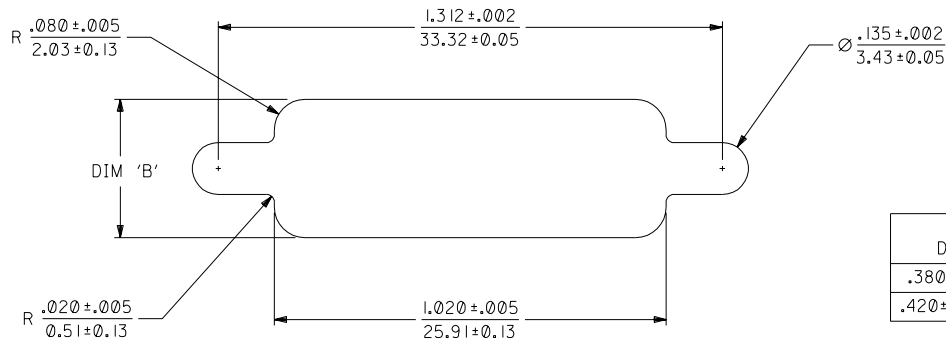
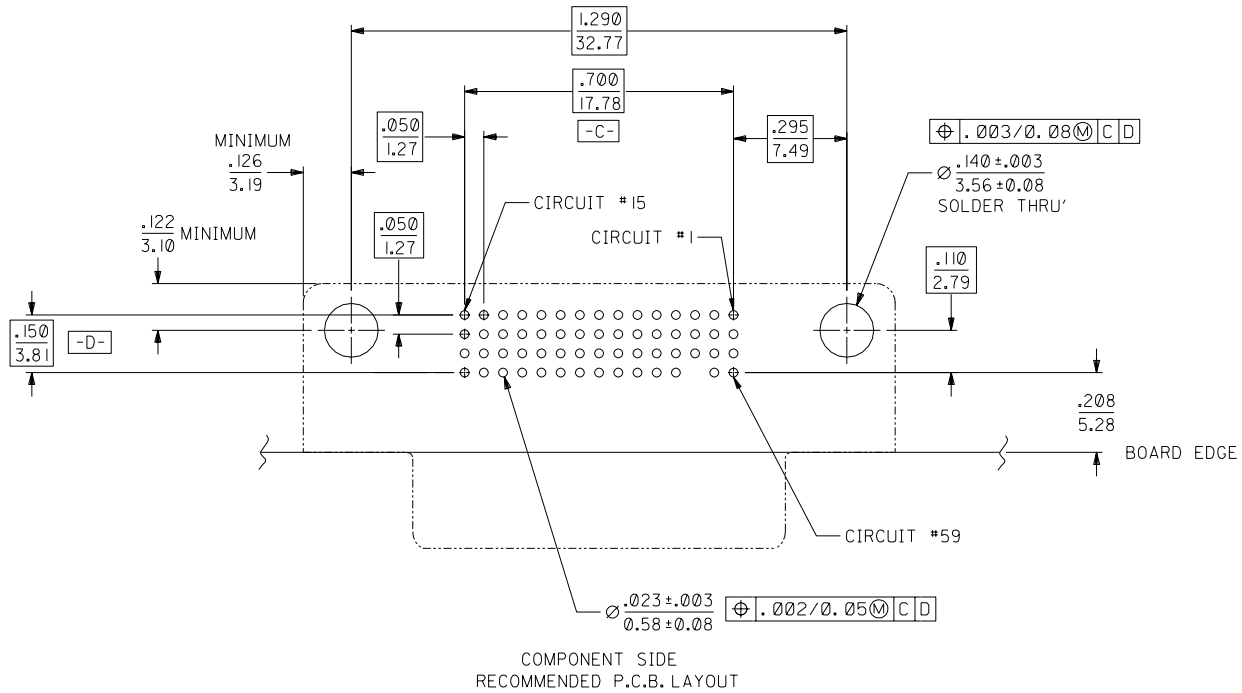
NOTE FOR LEAD FREE CONVERSION:
THE PRIMARY SHIPPING CARTON WILL BE LABELED "COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC". CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH LEAD.



OPTIONAL HEXAGONAL SCREWLOCK



ADD NOTE 6 EC NO: UCP2006-3051 DRAWN BY: BARRA 2006/07/10 CHKD: DMORGAN 2006/07/10 APPR: SMILLER 2006/07/11	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		mm	INCH	IN/MM		4:1	INCH		
		4 PLACES	± .010	± .010	DMORGAN	2002/10/18	SALES DMS-59 RECEPTACLE		
		3 PLACES	± .025	± .015	CHECKED BY	DATE	LFH .050/1.27 PITCH		
		2 PLACES	± .038	± .015	BBARKER	2002/10/18	RIGHT ANGLE I/O 59 CKT		
		1 PLACE	± .038	± .015	APPROVED BY	DATE	MOLEX INCORPORATED		
		ANGULAR ±1/2°		MATERIAL NO.	SMILLER	2002/10/18	SD-75134-001		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE		SEE TABLE		DOCUMENT NO.		SHEET NO.	
		C		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				1 OF 2	



DIMENSION 'B'	MAXIMUM PANEL THICKNESS
.380 ± .005 / 9.65 ± 0.13	.039 / 0.99
.420 ± .005 / 10.67 ± 0.13	.064 / 1.63

RECOMMENDED PANEL CUT-OUT

INITIAL RELEASE EC NO. UCP2003-0543 DRWN:DMORGAN 02/10/18 CHK: BBARKER 02/10/18 APPR:SMILLER 02/10/18	DESCRIPTION MAJOR CRITICAL	QUALITY SYMBOLS	GENERAL TOLERANCES: (UNLESS SPECIFIED)	SCALE 4:1	DESIGN UNITS <input type="checkbox"/> mm <input checked="" type="checkbox"/> INCH	DIMENSIONS: <input type="checkbox"/> mm <input checked="" type="checkbox"/> INCH <input type="checkbox"/> mm ONLY	SHT	REV
		MAJOR CRITICAL	4 PLACES ±0. ±. 3 PLACES ±0. ±.010 2 PLACES ±0.25 ±.015 1 PLACE ±0.38 ±.	DRAWN BY & DATE DMORGAN 02/10/18	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY		
REV		ANGULAR: ± 1/2 °			TITLE: SALES DMS-59 RECEPTALCE LFH .050/1.27 PITCH RIGHT ANGLE I/O 59 CKT	MATERIAL NO. DRAWING NO.		SHEET NO.
A		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			MOLEX INCORPORATED	SEE CHART	SD-75134-001	2
					THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.			SIZE C