

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

**Part Number:** [0015389212](#)  
**Status:** **Active**  
**Overview:** [cgrid\\_sl\\_products](#)  
**Description:** 2.54mm (.100") Pitch SL™ FFC/FPC Connector - Single Row Male Version D, 21 Circuits

**Documents:**

[3D Model](#) [Product Specification PS-70430 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family FFC/FPC Connectors  
 Series [70431](#)  
 Comments Male  
 Overview [cgrid\\_sl\\_products](#)  
 Product Name SL™

**Physical**

Circuits (Loaded) 21  
 Color - Resin Black  
 Contact Position N/A  
 Durability (mating cycles max) 25  
 Entry Angle Vertical  
 Flammability 94V-0  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Tin  
 Material - Plating Termination Tin  
 Material - Resin Polyester Alloy  
 Number of Rows 1  
 Orientation Vertical  
 PCB Locator No  
 PCB Retention None  
 Packaging Type Tube  
 Pitch - Mating Interface (in) 0.100 In  
 Pitch - Mating Interface (mm) 2.54 mm  
 Plating min: Mating (µin) 150  
 Plating min: Mating (µm) 3.75  
 Plating min: Termination (µin) 150  
 Plating min: Termination (µm) 3.75  
 Polarized to PCB No  
 Stackable Yes  
 Surface Mount Compatible (SMC) N/A  
 Temperature Range - Operating -40°C to +105°C  
 Termination Interface: Style IDT or Pierce  
 Wire/Cable Type FFC/FPC

**Electrical**

Current - Maximum per Contact 2A  
 Voltage - Maximum 250V

**Material Info**

**Reference - Drawing Numbers**



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Contains SVHC: No**  
**Halogen-Free Status**  
**Not Reviewed**

**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**  
 70431Series

This document was generated on 05/18/2010

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OPTION -A-

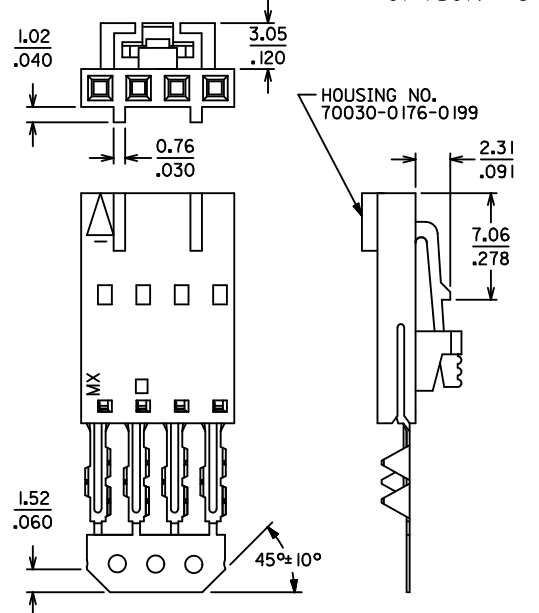


OPTION -D-



OPTIONAL CORE-OUT FOR HOUSING OPTIONS A & D  
CKT. SIZES 2-25  
(FOR CONTROL OF BOW)

OPTION -G-



- NOTES:  
1. HOUSING: POLYESTER (PBT), UL94 V-0  
COLOR: BLACK  
TERMINAL: PHOSPHOR-BRONZE  
2. FINISHES:  
SEE PAGE 2 FOR PLATING FINISHES  
3. PRODUCT SPECIFICATION: PS-70430  
4. PACKAGING SPECIFICATION: PK-70873-0001  
5. SEE CHART FOR CIRCUIT SIZES  
6. TERMINALS ARE SHOWN PRE-LOADED INTO HOUSING AND LOCKED INTO FIRST ROW OF LOCKING TANG WINDOWS  
7. ALL DIMENSIONS ARE FOR REFERENCE ONLY  
8. SEE SHEET 2 FOR PART NUMBERS AND PLATINGS

CKT. SIZE	DIM. "A" (MAX.)	DIM. "B" (MAX.)
2	(2.54) .100	(5.05) .199
3	(5.08) .200	(7.59) .299
4	(7.62) .300	(10.13) .399
5	(10.16) .400	(12.67) .499
6	(12.70) .500	(15.21) .599
7	(15.24) .600	(17.75) .699
8	(17.78) .700	(20.29) .799
9	(20.32) .800	(22.83) .899
10	(22.86) .900	(25.37) .999
11	(25.40) 1.000	(27.91) 1.099
12	(27.94) 1.100	(30.45) 1.199
13	(30.48) 1.200	(32.99) 1.299
14	(33.02) 1.300	(35.53) 1.399
15	(35.56) 1.400	(38.07) 1.499
16	(38.10) 1.500	(40.61) 1.599
17	(40.64) 1.600	(43.15) 1.699
18	(43.18) 1.700	(45.69) 1.799
19	(45.72) 1.800	(48.23) 1.899
20	(48.26) 1.900	(50.77) 1.999
21	(50.80) 2.000	(53.31) 2.099
22	(53.34) 2.100	(55.85) 2.199
23	(55.88) 2.200	(58.39) 2.299
24	(58.42) 2.300	(60.93) 2.399
25	(60.96) 2.400	(63.47) 2.499

MODIFY PRODUCT SPEC	EC NO: UCP2010-0987	2009/12/28
	DRW:MS BARRA	2010/01/08
	CHKD:DMORGAN	2010/01/08
	APPR:SMILLER	2010/01/11
	REV	DESCRIPTION

QUALITY SYMBOLS	▽=0
	▽=0
GENERAL TOLERANCES (UNLESS SPECIFIED)	mm
	INCH
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	4 PLACES ± --- ± ---
	3 PLACES ± --- ± ---
	2 PLACES ± --- ± ---
	1 PLACE ± --- ± ---
	ANGULAR ±1/2°

DIMENSION STYLE		SCALE	DESIGN UNITS
MM/IN		4:1	INCH
DRAWN BY	DATE	TITLE	
MGB	12/21/88	ASSY, SL CONNECTOR, FFC	
CHECKED BY	DATE	MALE, SINGLE ROW	
MGB	12/21/88	2.54/.100 GRID	
APPROVED BY	DATE	Molex MOLEX INCORPORATED	
WAZ	12/21/88	SDA-70431-****	
MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
SEE TABLE		1 OF 2	

THIRD ANGLE PROJECTION	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	

CKT. SIZE	TIN PLATE OPTION -A-		TIN PLATE OPTION -D-		15 GOLD PLATE OPTION -A-		15 GOLD PLATE OPTION -D-		30 GOLD PLATE OPTION -A-		30 GOLD PLATE OPTION -D-		TIN PLATE OPTION -G-	
	EDP. NO.	ENG. NO.	EDP. NO.	ENG. NO.	EDP. NO.	ENG. NO.	EDP. NO.	ENG. NO.	EDP. NO.	ENG. NO.	EDP. NO.	ENG. NO.	EDP. NO.	ENG. NO.
2	15-38-9020	A-70431-0001	15-38-9022	A-70431-0071	15-47-4028	A-70431-0176	15-47-5020	A-70431-0246	15-47-5022	A-70431-0351	15-47-5024	A-70431-0421		
3	-9030	-0002	-9032	-0072	-4038	-0177	-5030	-0247	-5032	-0352	-5034	-0422		
4	-9040	-0003	-9042	-0073	-4048	-0178	-5040	-0248	-5042	-0353	-5044	-0423		
5	-9050	-0004	-9052	-0074	-4058	-0179	-5050	-0249	-5052	-0354	-5054	-0424		
6	-9060	-0005	-9062	-0075	-4068	-0180	-5060	-0250	-5062	-0355	-5064	-0425		
7	-9070	-0006	-9072	-0076	-4078	-0181	-5070	-0251	-5072	-0356	-5074	-0426		
8	-9080	-0007	-9082	-0077	-4088	-0182	-5080	-0252	-5082	-0357	-5084	-0427		
9	-9090	-0008	-9092	-0078	-4098	-0183	-5090	-0253	-5092	-0358	-5094	-0428		
10	-9100	-0009	-9102	-0079	-4108	-0184	-5100	-0254	-5102	-0359	-5104	-0429	15-38-9103	A-70431-0149
11	-9110	-0010	-9112	-0080	-4118	-0185	-5110	-0255	-5112	-0360	-5114	-0430		
12	-9120	-0011	-9122	-0081	-4128	-0186	-5120	-0256	-5122	-0361	-5124	-0431		
13	-9130	-0012	-9132	-0082	-4138	-0187	-5130	-0257	-5132	-0362	-5134	-0432		
14	-9140	-0013	-9142	-0083	-4148	-0188	-5140	-0258	-5142	-0363	-5144	-0433		
15	-9150	-0014	-9152	-0084	-4158	-0189	-5150	-0259	-5152	-0364	-5154	-0434		
16	-9160	-0015	-9162	-0085	-4168	-0190	-5160	-0260	-5162	-0365	-5164	-0435		
17	-9170	-0016	-9172	-0086	-4178	-0191	-5170	-0261	-5172	-0366	-5174	-0436		
18	-9180	-0017	-9182	-0087	-4188	-0192	-5180	-0262	-5182	-0367	-5184	-0437		
19	-9190	-0018	-9192	-0088	-4198	-0193	-5190	-0263	-5192	-0368	-5194	-0438		
20	-9200	-0019	-9202	-0089	-4208	-0194	-5200	-0264	-5202	-0369	-5204	-0439		
21	-9210	-0020	-9212	-0090	-4218	-0195	-5210	-0265	-5212	-0370	-5214	-0440		
22	-9220	-0021	-9222	-0091	-4228	-0196	-5220	-0266	-5222	-0371	-5224	-0441		
23	-9230	-0022	-9232	-0092	-4238	-0197	-5230	-0267	-5232	-0372	-5234	-0442		
24	-9240	-0023	-9242	-0093	-4248	-0198	-5240	-0268	-5242	-0373	-5244	-0443		
25	15-38-9250	A-70431-0024	15-38-9252	A-70431-0094	15-47-4258	A-70431-0199	15-47-5250	A-70431-0269	15-47-5252	A-70431-0374	15-47-5254	A-70431-0444		

PLATING PER ES-88:	CARRIER STRIP COLOR CODE
TIN	NONE
15 GOLD	YELLOW
30 GOLD	RED

PLATING CHART PER ES-88-\*\*\*

TIN: TIN OVERALL  
THICKNESS: 3.81 MICROMETERS (150 MICROINCHES) MINIMUM ALL OVER A NICKEL UNDERPLATE.

15 GOLD: SELECTIVE GOLD (Au) WITH SELECTIVE TIN  
THICKNESS: 0.38 MICROMETERS (15 MICROINCHES) MINIMUM GOLD (Au) IN SELECT AREA  
1.90 MICROMETERS (75 MICROINCHES) MINIMUM TIN IN SELECT AREA ALL OVER A NICKEL UNDERPLATE.

30 GOLD: SELECTIVE GOLD (Au) WITH SELECTIVE TIN  
THICKNESS: 0.76 MICROMETERS (30 MICROINCHES) MINIMUM GOLD (Au) IN SELECT AREA  
1.90 MICROMETERS (75 MICROINCHES) MINIMUM TIN IN SELECT AREA ALL OVER A NICKEL UNDERPLATE.

SEE SHEET 1 EC NO: UCP2010-0987 DRAWN BY: DRWINMS BARRA 2009/12/28 CHKD BY: CHKD:DMORGAN 2010/01/08 APPR: MILLER 2010/01/11	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE 1:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	
		4 PLACES ± ---	± ---	DRAWN BY MGB	DATE 12/21/88	TITLE ASSY, SL CONNECTOR, FFC MALE, SINGLE ROW 2.54/.100 GRID			
		3 PLACES ± ---	± ---	CHECKED BY MGB	DATE 12/21/88				
		2 PLACES ± ---	± ---	APPROVED BY WAZ		DATE 12/21/88	MATERIAL NO. DOCUMENT NO. SDA-70431-****		
1 PLACE ± ---	± ---	ANGULAR ±1/2°							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SHEET NO. 2 OF 2		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			