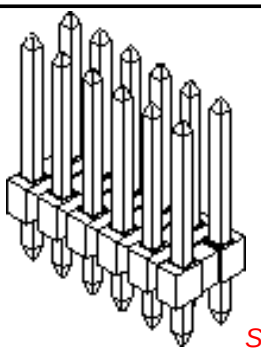
This document was generated on 03/31/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: 0702871227

Status: Active

Description: 2.54mm (.100") Pitch C-Grid® Header, Breakaway, Dual Row, Vertical, with Retention Pin, 66 Circuits, 6.10mm (.240") Mating Pin Length, 0.76µm (30µ") Gold (Au) Selective Plating



Series image - Reference only

Documents:

3D Model
Packaging Specification (PDF)
Drawing (PDF)
Product Specification PS-70280 (PDF)
RoHS Certificate of Compliance (PDF)

Agency Certification

CSA	LR19980
UL	E29179

General

Product Family	PCB Headers
Series	70287
Application	Board-to-Board, Wire-to-Board
Product Name	C-Grid®

Physical

Breakaway	Yes
Circuits (Loaded)	66
Circuits (maximum)	66
Color - Resin	Black
Durability (mating cycles max)	25
First Mate / Last Break	No
Flammability	94V-0
Glow-Wire Compliant	No
Guide to Mating Part	No
Keying to Mating Part	N/A
Lock to Mating Part	None
Material - Metal	Brass
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Number of Rows	2
Orientation	Vertical
PC Tail Length (in)	0.125 In
PC Tail Length (mm)	3.18 mm
PCB Locator	No
PCB Retention	None
PCB Thickness Recommended (in)	0.062 In
PCB Thickness Recommended (mm)	1.57 mm
Packaging Type	Bag
Pitch - Mating Interface (in)	0.100 In
Pitch - Mating Interface (mm)	2.54 mm
Pitch - Term. Interface (in)	0.100 In
Pitch - Term. Interface (mm)	2.54 mm
Plating min: Mating (µin)	32.000
Plating min: Mating (µm)	0.80
Plating min: Termination (µin)	80.000
Plating min: Termination (µm)	2.00
Polarized to Mating Part	No
Polarized to PCB	No

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
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
70287Series

Mates With
7859 Shunt, C-Grid Receptacles, SL™ Crimp, FFC and IDT Housing

Shrouded	No
Stackable	Yes
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-40°C to +120°C
Termination Interface: Style	Through Hole

Electrical

Current - Maximum per Contact	3A
Voltage - Maximum	250V DC

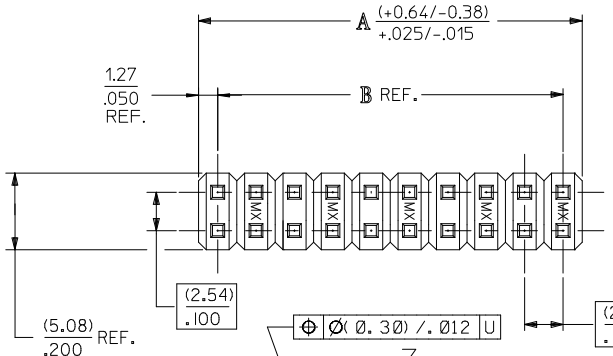
Solder Process Data

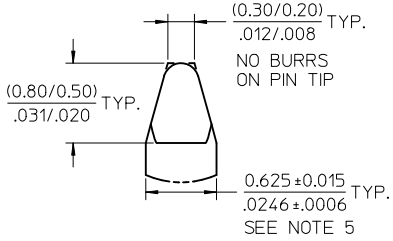
Duration at Max. Process Temperature (seconds)	5
Lead-free Process Capability	Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

Material Info

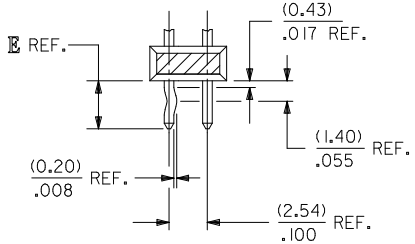
Reference - Drawing Numbers

Product Specification	PS-70280
Sales Drawing	SD-70287-004

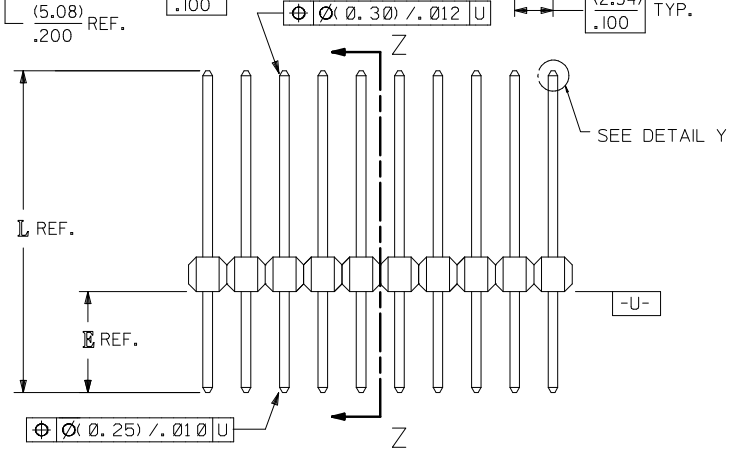


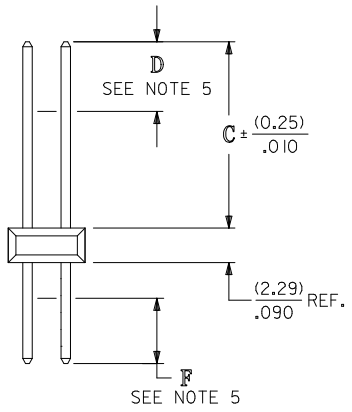


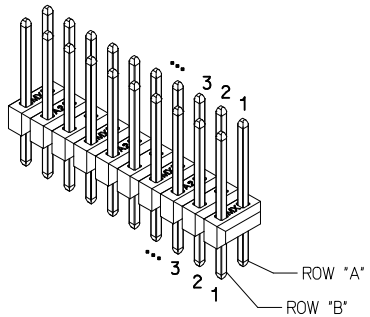
DETAIL "Y"
SCALE 30:1



SECTION Z-Z - RETENTION PIN DETAIL
2 CONTACTS LOCATED ON CENTER OF SAME ROW
(SEE NOTE 6)







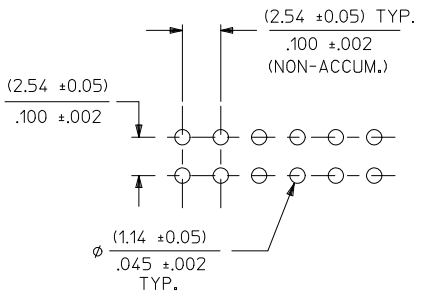
VIEW "A"

NOTES:

1. MATERIAL: WAFER - GLASS FILLED LIQUID CRYSTAL POLYMER, UL94V-0, COLOR: BLACK
   PIN - COPPER ALLOY
2. FINISH: (TIN) OVERALL TIN: (0.00381)/.000150 MIN.,
   OVERALL NICKEL UNDERPLATE: (0.00127)/.000050 MIN.
   (15 GOLD) SELECT GOLD: (0.00038)/.000015 MIN.,
   SELECT TIN: (0.00191)/.000075 MIN,.
   OVERALL NICKEL UNDERPLATE: (0.00127)/.000050 MIN.
   (30 GOLD) SELECT GOLD: (0.00076)/.000030 MIN.,
   SELECT TIN: (0.00191)/.000075 MIN,.
   OVERALL NICKEL UNDERPLATE: (0.00127)/.000050 MIN.
3. PRODUCT SPECIFICATION: PS-70280
4. PACKAGING INFORMATION: (UNLESS OTHERWISE NOTED IN TABLES)
   PARTS TO BE PACKAGED PER PK-70873-0353.
5. MEASURE POINT FOR PLATING THICKNESS. DIMENSION D
   IS ALSO THE MEASURE POINT FOR PIN WIDTH.
6. RETENTIVE TAIL LOCATIONS (SEE VIEW "A")

NUMBER OF CIRCUITS IN ROW B	RETENTIVE TAIL LOCATIONS
EVEN NUMBER	2 PINS IN THE MIDDLE OF ROW B
ODD NUMBER	PIN IN THE CENTER OF ROW B AND ONE OTHER PIN IN ROW B ON EITHER SIDE OF THE CENTER PIN

7. PIN PUSHOUT FORCE: 3 LBS. MIN. (IN EITHER DIRECTION)
8. FOR ILLUSTRATION PURPOSES, 20 (DUAL 10) CIRCUIT SIZE IS SHOWN.
9. PINS MUST MEET SOLDERABILITY SPEC. SMES-152, EXCEPT VOIDS ARE PERMISSIBLE AT BANDOLIER PIN FAYING SURFACE. (APPROXIMATELY (0.64)/.025 LNG X (0.15)/.006 WIDE AT 2 LOCATIONS)
10. PARTS CONFORM TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.



PCB LAYOUT: COMPONENT SIDE
TYPICAL PCB THICKNESS: (1.57)/.062

CKT. SIZE	DIM. A REF. (MM)	DIM. A REF. INCH	DIM. B REF. (MM)	DIM. B REF. INCH
4	(5.08)	.200	(2.54)	.100
6	(7.62)	.300	(5.08)	.200
8	(10.16)	.400	(7.62)	.300
10	(12.70)	.500	(10.16)	.400
12	(15.24)	.600	(12.70)	.500
14	(17.78)	.700	(15.24)	.600
16	(20.32)	.800	(17.78)	.700
18	(22.86)	.900	(20.32)	.800
20	(25.40)	1.000	(22.86)	.900
22	(27.94)	1.100	(25.40)	1.000
24	(30.48)	1.200	(27.94)	1.100
26	(33.02)	1.300	(30.48)	1.200
28	(35.56)	1.400	(33.02)	1.300
30	(38.10)	1.500	(35.56)	1.400
32	(40.64)	1.600	(38.10)	1.500
34	(43.18)	1.700	(40.64)	1.600
36	(45.72)	1.800	(43.18)	1.700
38	(48.26)	1.900	(45.72)	1.800
40	(50.80)	2.000	(48.26)	1.900
42	(53.34)	2.100	(50.80)	2.000
44	(55.88)	2.200	(53.34)	2.100
46	(58.42)	2.300	(55.88)	2.200
48	(60.96)	2.400	(58.42)	2.300
50	(63.50)	2.500	(60.96)	2.400
52	(66.04)	2.600	(63.50)	2.500
54	(68.58)	2.700	(66.04)	2.600
56	(71.12)	2.800	(68.58)	2.700
58	(73.66)	2.900	(71.12)	2.800
60	(76.20)	3.000	(73.66)	2.900
62	(78.74)	3.100	(76.20)	3.000
64	(81.28)	3.200	(78.74)	3.100
66	(83.82)	3.300	(81.28)	3.200
68	(86.36)	3.400	(83.82)	3.300
70	(88.90)	3.500	(86.36)	3.400
72	(91.44)	3.600	(88.90)	3.500
74	(93.98)	3.700	(91.44)	3.600
76	(96.52)	3.800	(93.98)	3.700
78	(99.06)	3.900	(96.52)	3.800
80	(101.06)	4.000	(99.06)	3.900
82	(104.14)	4.100	(101.06)	4.000
84	(106.68)	4.200	(104.14)	4.100
86	(109.22)	4.300	(106.68)	4.200
88	(111.76)	4.400	(109.22)	4.300
90	(114.30)	4.500	(111.76)	4.400
92	(116.84)	4.600	(114.30)	4.500
94	(119.38)	4.700	(116.84)	4.600
96	(121.92)	4.800	(119.38)	4.700
98	(124.46)	4.900	(121.92)	4.800
100	(127.00)	5.000	(124.46)	4.900

2-*	A
1	A
SHT.	REV.

REV	DESCRIPTION	DATE
A	INITIAL RELEASE	2010/03/02
	EC NO: UCP2010-0011	2010/02/15
	DRWN:MKIPPER	2010/02/12
	CH'KD: JBELL	
	APPR:FSMITH	

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .005
2 PLACES	± 0.13	± .01
1 PLACE	± 0.25	± ---
ANGULAR ±1/2°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE	MM/IN
SCALE	1:1
DESIGN UNITS	INCH
	THIRD ANGLE PROJECTION
DRAWN BY	MKIPPER
DATE	2009/11/02
CHECKED BY	JBELL
DATE	2009/11/02
APPROVED BY	FSMITH
DATE	2009/11/02
MATERIAL NO.	SEE CHART
DOCUMENT NO.	SD-70287-004
SHEET NO.	1 OF *
SIZE	C

TITLE: SALES ASSY-HIGH TEMP. DUAL ROW, .025" SQ PINS .100" GRID W/ RET. PINS

MOLEX INCORPORATED

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

ENG. NO: A-70287-1000 / 1048				
DIM. C		(6.10) / .240		
DIM. E (REF.)		(3.18) / .125		
DIM. L (REF.)		(11.56) / .455		
MATING SIDE PLATING		TIN		
DIM. D (MEASURE PT.)		(2.54) / .100		
P.C. BOARD SIDE PLATING		TIN		
DIM. F (MEASURE PT.)		(1.27) / .050		
RETENTIVE PIN LOCATION		SEE NOTE 6, SHEET 1		
PACKAGING		BULK - PK-70873-0353		
CKTS	MATERIAL NUMBER		CKTS	MATERIAL NUMBER
04	70287-1000		54	70287-1025
06	70287-1001		56	70287-1026
08	70287-1002		58	70287-1027
10	70287-1003		60	70287-1028
12	70287-1004		62	70287-1029
14	70287-1005		64	70287-1030
16	70287-1006		66	70287-1031
18	70287-1007		68	70287-1032
20	70287-1008		70	70287-1033
22	70287-1009		72	70287-1034
24	70287-1010		74	70287-1035
26	70287-1011		76	70287-1036
28	70287-1012		78	70287-1037
30	70287-1013		80	70287-1038
32	70287-1014		82	70287-1039
34	70287-1015		84	70287-1040
36	70287-1016		86	70287-1041
38	70287-1017		88	70287-1042
40	70287-1018		90	70287-1043
42	70287-1019		92	70287-1044
44	70287-1020		94	70287-1045
46	70287-1021		96	70287-1046
48	70287-1022		98	70287-1047
50	70287-1023		100	70287-1048
52	70287-1024			

ENG. NO: A-70287-1098 / 1146				
DIM. C		(6.10) / .240		
DIM. E (REF.)		(3.18) / .125		
DIM. L (REF.)		(11.56) / .455		
MATING SIDE PLATING		15 GOLD		
DIM. D (MEASURE PT.)		(2.54) / .100		
P.C. BOARD SIDE PLATING		TIN		
DIM. F (MEASURE PT.)		(1.27) / .050		
RETENTIVE PIN LOCATION		SEE NOTE 6, SHEET 1		
PACKAGING		BULK - PK-70873-0353		
CKTS	MATERIAL NUMBER		CKTS	MATERIAL NUMBER
04	70287-1098		54	70287-1123
06	70287-1099		56	70287-1124
08	70287-1100		58	70287-1125
10	70287-1101		60	70287-1126
12	70287-1102		62	70287-1127
14	70287-1103		64	70287-1128
16	70287-1104		66	70287-1129
18	70287-1105		68	70287-1130
20	70287-1106		70	70287-1131
22	70287-1107		72	70287-1132
24	70287-1108		74	70287-1133
26	70287-1109		76	70287-1134
28	70287-1110		78	70287-1135
30	70287-1111		80	70287-1136
32	70287-1112		82	70287-1137
34	70287-1113		84	70287-1138
36	70287-1114		86	70287-1139
38	70287-1115		88	70287-1140
40	70287-1116		90	70287-1141
42	70287-1117		92	70287-1142
44	70287-1118		94	70287-1143
46	70287-1119		96	70287-1144
48	70287-1120		98	70287-1145
50	70287-1121		100	70287-1146
52	70287-1122			

REV:	ECR/ECN INFORMATION	TITLE:	SHEET No.
A	EC No: **UCP2010-0011** DATE: **3/2/2010**	SALES ASS'Y – HIGH TEMP. DUAL ROW, .025" SQ PINS .100" GRID W/ RET. PINS	**- 2 -**

DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
SD-70287-004	**MKIPPER**	**JBELL**	**FSMITH**

ENG. NO: A-70287-1196 / 1244				
DIM. C			(6.10) / .240	
DIM. E (REF.)			(3.18) / .125	
DIM. L (REF.)			(11.56) / .455	
MATING SIDE PLATING			30 GOLD	
DIM. D (MEASURE PT.)			(2.54) / .100	
P.C. BOARD SIDE PLATING			TIN	
DIM. F (MEASURE PT.)			(1.27) / .050	
RETENTIVE PIN LOCATION			SEE NOTE 6, SHEET 1	
PACKAGING			BULK - PK-70873-0353	
CKTS	MATERIAL NUMBER		CKTS	MATERIAL NUMBER
04	70287-1196		54	70287-1221
06	70287-1197		56	70287-1222
08	70287-1198		58	70287-1223
10	70287-1199		60	70287-1224
12	70287-1200		62	70287-1225
14	70287-1201		64	70287-1226
16	70287-1202		66	70287-1227
18	70287-1203		68	70287-1228
20	70287-1204		70	70287-1229
22	70287-1205		72	70287-1230
24	70287-1206		74	70287-1231
26	70287-1207		76	70287-1232
28	70287-1208		78	70287-1233
30	70287-1209		80	70287-1234
32	70287-1210		82	70287-1235
34	70287-1211		84	70287-1236
36	70287-1212		86	70287-1237
38	70287-1213		88	70287-1238
40	70287-1214		90	70287-1239
42	70287-1215		92	70287-1240
44	70287-1216		94	70287-1241
46	70287-1217		96	70287-1242
48	70287-1218		98	70287-1243
50	70287-1219		100	70287-1244
52	70287-1220			

ENG. NO: A-70287-1294			
DIM. C		(6.10) / .240	
DIM. E (REF.)		(3.18) / .125	
DIM. L (REF.)		(11.56) / .455	
MATING SIDE PLATING		TIN	
DIM. D (MEASURE PT.)		(2.54) / .100	
P.C. BOARD SIDE PLATING		TIN	
DIM. F (MEASURE PT.)		(1.27) / .050	
RETENTIVE PIN LOCATION		ROW B - CKTS 1, 5 (SEE NOTE 6, SHEET 1)	
PACKAGING		BULK - PK-70873-0353	
		VOID PIN LOCATION	
CKTS	MATERIAL NUMBER	ROW	LOCATION
10	70287-1294	A	2, 3
		B	2, 3

REV:	ECR/ECN INFORMATION	TITLE:	SHEET No.
A	EC No: **UCP2010-0011** DATE: **3/2/2010**	SALES ASS'Y – HIGH TEMP. DUAL ROW, .025" SQ PINS .100" GRID W/ RET. PINS	**- 3 -**

DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
SD-70287-004	**MKIPPER**	**JBELL**	**FSMITH**

ENG. NO: A-70287-1295	
DIM. C	(5.84) / .230
DIM. E (REF.)	(2.97) / .117
DIM. L (REF.)	(11.10) / .437
MATING SIDE PLATING	15 GOLD
DIM. D (MEASURE PT.)	(2.54) / .100
P.C. BOARD SIDE PLATING	TIN
DIM. F (MEASURE PT.)	(1.27) / .050
RETENTIVE PIN LOCATION	ROW B - CKTS 3, 4 (SEE NOTE 6, SHEET 1)
PACKAGING	BULK - PK-70873-0353

		VOID PIN LOCATION	
CKTS	MATERIAL NUMBER	ROW	LOCATION
10	70287-1295	A	1

REV:	ECR/ECN INFORMATION	TITLE:	SHEET No.
A	EC No: **UCP2010-0011** DATE: **3/2/2010**	SALES ASS'Y – HIGH TEMP. DUAL ROW, .025" SQ PINS .100" GRID W/ RET. PINS	**- 4 -**

DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
SD-70287-004	**MKIPPER**	**JBELL**	**FSMITH**