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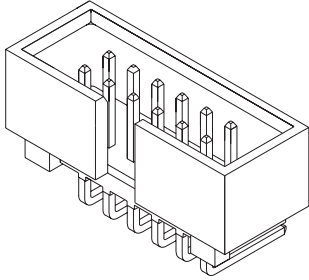
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Jameco Part Number 1976144

2.54mm (.100") Pitch C-Grid® Shrouded Header

70247

**Dual Row, Low Profile
Right Angle**



Features and Benefits

- Sizes 8 to 64 circuits
- Polarized slot
- Low profile
- High temperature material version available, contact Molex

Reference Information

Product Specification: PS-70246-100
 UL File No.: E29179 (H)
 CSA File No.: LR19980A
 Mates With: .050" pitch ribbon cable connectors
 Designed In: Inches

Electrical

Voltage: 250V
 Current: 2.5A DC min.
 Contact Resistance: 15 milliohms max.
 Dielectric Withstanding Voltage: 600V
 Insulation Resistance: 1000 Megohms min.

Mechanical

Contact Retention to Housing: 1.8kg (4 lb)
 Durability: 50 cycles Gold

Physical

Housing: Black glass-filled PBT, UL 94V-0
 Contact: Phosphor Bronze
 Plating: See Table
 Operating Temperature: -55 to +120°C

Not For Use With C-Grid III™ Components

Circuits	Order No.		Lead-fee
	15µ" Gold	30µ" Gold	
8	70247-0851	70247-0852	Yes
10	70247-1051	70247-1052	
12	70247-1251	70247-1252	
14	70247-1451	70247-1452	
16	70247-1651	70247-1652	
20	70247-2051	70247-2052	
24	70247-2451	70247-2452	
26	70247-2651	70247-2652	
30	70247-3051	70247-3052	

Circuits	Order No.		Lead-fee
	15µ" Gold	30µ" Gold	
34	70247-3451	70247-3452	Yes
40	70247-4051	70247-4052	
44	70247-4451	70247-4452	
48	70247-4851	70247-4852	
50	70247-5051	70247-5052	
56	70247-5651	70247-5652	
60	70247-6051	70247-6052	
64	70247-6451	70247-6452	
72	70247-7251	70247-7252	



PRODUCT SPECIFICATION

5.0 PERFORMANCE

5.1 ELECTRICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Insulation Resistance	Measurements taken between adjacent contacts where 500VDC is applied. (MIL-STD-202F, Method 302)	12000 Megaohms Minimum
2	Dielectric Strength	Mated samples subjected to 900 VAC rms for 1 min. between adjacent contacts. (MIL-STD-202F, Method 301)	No breakdown
3	Current Rating	Steady state DC voltage source is supplied for 96 hours with a 30 degree C Max. temperature rise over ambient	2.5 amp (D.C.) Maximum

5.2 MECHANICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
4	Contact Retention	Apply axial load at a rate of 0.5 inch/ (12.7mm) minimum up to maximum required load. (MIL-STD-1344A, Method 2007.1)	2 lb / 0.91kgf (Minimum) Initial 0.88 lb / 0.40kgf (Minimum) After resistance to solder heat

REVISION:	ECR/ECN INFORMATION:	TITLE:	SHEET No.
H2	EC No: S2006-0380 DATE: 2005/09/23	C-GRID SHROUDED WAFER	2 of 3
DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
PS-70246-100	YLQIAO 2005/09/23	BOKOK 2005/09/27	PTLIM 2005/09/27



PRODUCT SPECIFICATION

5.3 ENVIRONMENTAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
5	Resistance to Soldering Heat (Wave Soldering) For Series: 87256, 87257, 87834, 87835, 70246, 70247 87556	Sample mounted on PCB and subject to wave soldering as per MIL-STD-202G, method 210F, Condition B For series using a) Nylon 4/6 plastic material Temperature : 260 ±5°C for 5sec b) PBT / PET plastic material Temperature : 230 ±5°C for 3sec	No damage in appearance of the connector
6	Resistance to Soldering Heat (Reflow) For Series: 71384, 87054	1. <u>Preheat</u> : Increase in temperature < 4°C /sec 2. <u>Soldering</u> : Maximum Reflow temperature < 230°C 3. <u>Cool Down</u> : Cool temperature < 4°C /sec	No damage in appearance of the connector
7	Solderability	Solder tail to be dipped in flux as per MIL-STD-202F, method 208	Soldertail should have 95% continuous new solder coating coverage (Apply to non-kinked Soldertail only)

6.0 PACKAGING

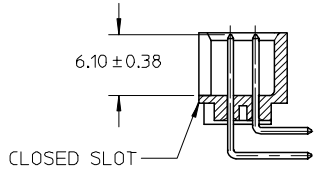
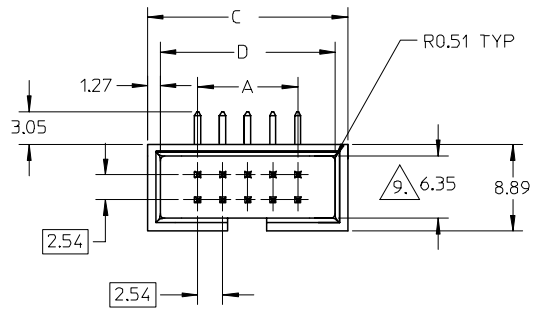
Product shall be packaged and protected against damage during handling, transportation and storage.

REVISION: H2	ECR/ECN INFORMATION: EC No: S2006-0380 DATE: 2005/09/23	TITLE: C-GRID SHROUDED WAFER	SHEET No. 3 of 3
DOCUMENT NUMBER: PS-70246-100	CREATED / REVISED BY: YLQIAO 2005/09/23	CHECKED BY: BOKOK 2005/09/27	APPROVED BY: PTLIM 2005/09/27

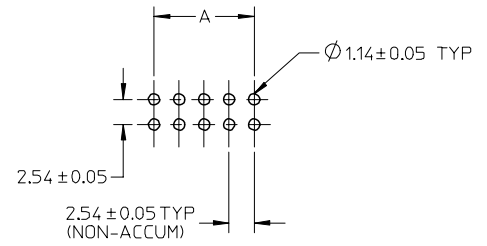
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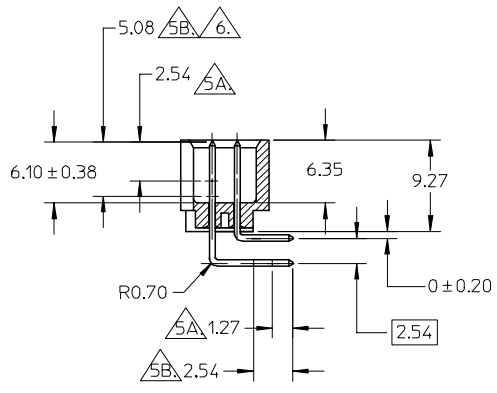
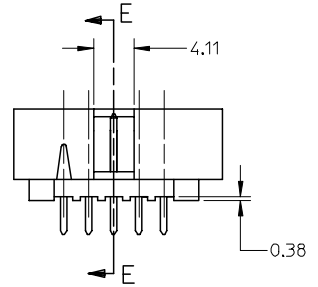
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MOLEX IRELAND PRODUCTION ONLY
(OPTION)

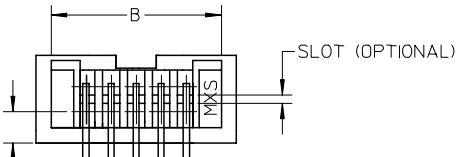
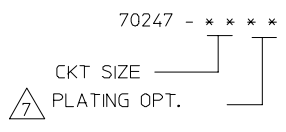


RECOMMENDED PCB HOLE LAYOUT



SECTION E-E

LEGEND:



⊕ ⌀ 0.38

AT TIPS BOTH ENDS

REVISED NOTES 7 EC NO: S2007-0009 DRWN:GMENARLY 2006/07/26 CHKD:MLONG 2006/07/26 APPR:SKTOH 2006/07/27	DESCRIPTION H1	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		▽=0 ▽C=0	4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 °	DRAWN BY JENNIFER CHECKED BY MLA1 APPROVED BY ALANB MATERIAL NO.	DATE 1987/09/21 DATE 1987/09/21 DATE 1987/09/21 DOCUMENT NO.	TITLE C-GRID, SHROUDED HEADER R/A (SLOTTED W/O STANDOFFS) MOLEX INCORPORATED	SHEET NO. 1 OF 2
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	SDA-70247-* * 00-04			
		SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1


NOTES:

1. PIN PUSHOUT FORCE (.9072KG)/2LBS MIN.
2. PIN SOLDERABILITY PER MOLEX SPEC. ES-152.
3. PRODUCT SPEC: PS-70246 APPLIES.
4. WAFER TO BE FLAT WITHIN .003 MM/MM.
5. DIMENSIONS FOR PLATING LOCATION:

 MEASURE POINT FOR THICKNESS

 MINIMUM COVERAGE


 GOLD END OF PIN UNLESS OVERALL PLATED.

 FINISH: - 51 : 15 MICRO INCHES MIN GOLD PLATE ON CONTACT AND 75 MICRO INCHES MIN TIN PLATE ON SOLDERTAIL BOTH OVER 50 MICRO INCHES MIN NICKEL OVERALL.

- 52 : 30 MICRO INCHES MIN GOLD PLATE ON CONTACT AND 75 MICRO INCHES MIN TIN PLATE ON SOLDERTAIL BOTH OVER 50 MICRO INCHES MIN NICKEL OVERALL.

- 54 : 5 MICRO INCHES MIN GOLD PLATE ON CONTACT AND 75 MICRO INCHES MIN TIN PLATE ON SOLDERTAIL BOTH OVER 50 MICRO INCHES MIN NICKEL OVERALL.


 CHECK WITH SALES OFFICE FOR AVAILABILITY.



 DIM AT THE CENTRE OF THE SHROUDED WALL SHALL BE 5.91MM MIN. THIS SPEC IS VALID FOR ALL CKT SIZE.

10. MATERIAL:

HSG: PBT, GLASS FILLED, UL94V-0, COLOUR: BLACK (SPEC NO: 89992-0028)

PIN: 0.64MM SQ. PIN PHOSPHOR BRONZE.

PART NUMBER 	CKT SIZE	DIM A	DIM B	DIM C	DIM D
70247-08**	08	7.62	14.73	17.78	15.24
70247-10**	10	10.16	17.27	20.32	17.78
70247-12**	12	12.70	19.81	22.86	20.32
70247-14**	14	15.24	22.35	25.40	22.86
70247-16**	16	17.78	24.89	27.94	25.40
70247-20**	20	22.86	29.97	33.02	30.48
70247-24**	24	27.94	35.05	38.10	35.56
70247-26**	26	30.48	37.59	40.64	38.10
70247-30**	30	35.56	42.67	45.72	43.18
70247-34**	34	40.64	47.75	50.80	48.26
70247-40**	40	48.26	55.37	58.42	55.88
70247-44**	44	53.34	60.45	63.50	60.96
70247-48**	48	58.42	65.53	68.58	66.04
70247-50**	50	60.96	68.07	71.12	68.58
70247-56**	56	68.58	75.69	78.74	76.20
70247-60**	60	73.66	80.77	83.82	81.28
70247-64**	64	78.74	85.85	88.90	86.36
70247-72**	72	88.90	96.01	99.06	96.52

REVISED NOTES 7 EC NO: S2007-0009 2006/07/26 DRWN:GMENARLY 2006/07/26 CHKD:MLONG 2006/07/26 APPR:SKTOH 2006/07/27	QUALITY SYMBOLS  = 0  = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY JENNIFER	DATE 1987/09/21	TITLE C-GRID, SHROUDED HEADER R/A (SLOTTED W/O STANDOFFS)			
		4 PLACES	± ---	± ---	CHECKED BY MLA1	DATE 1987/09/21				
		3 PLACES	± ---	± ---	APPROVED BY ALANB		DATE 1987/09/21	MOLEX INCORPORATED		
2 PLACES	± 0.20	± ---	MATERIAL NO.		DOCUMENT NO. SDA-70247-*00-04	SHEET NO. 2 OF 2				
1 PLACE	± ---	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

9 8 7 6 5 4 3 2 1