

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 4 to 80 circuits
- Kinked PC tail for retention to the board
- Stackable end-to-end (on unbroken edges)
- Extremely stable on board during wave soldering
- Drawn .025" square wire provides 4-sided smooth surface for quality interface

Reference Information

Product Specification: PS-8624

Packaging: Tube

UL File No.: E29179 (H)

CSA File No.: LR19980A

Mates With: 7859 Shunts, C-Grid Receptacles, SL Crimp and IDT Housings

Designed In: Inches

Electrical

Voltage: 250V

Current: 3.0A

Contact Resistance: 15mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 1000 MΩ min.

Mechanical

Pin Retention to Header: 17.79N (4 lb)

Durability: 25 cycles Tin/Lead and 50 cycles Gold

Physical

Housing: Glass-filled polyester, UL 94V-0

Contact: Phosphor Bronze

Plating: See Table

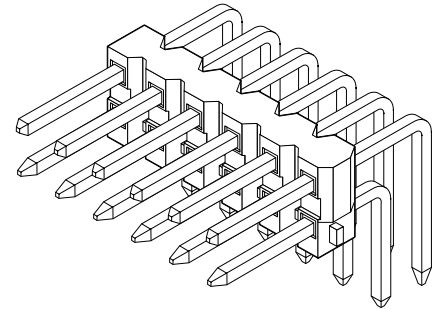
Operating Temperature: -40 to +105°C

molex® 2.54mm (.100") Pitch
C-Grid®

**Retention Pin
Breakaway Header**

70289

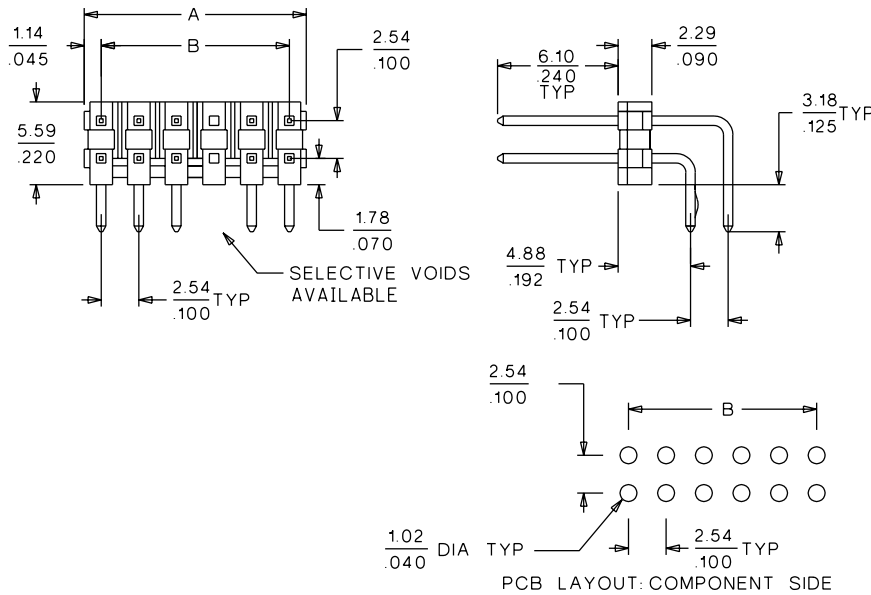
**High Profile, Dual Row
Right Angle**



2.54mm (.100") Pitch

CATALOG DRAWING (FOR REFERENCE ONLY)

Not For Use With Molex C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

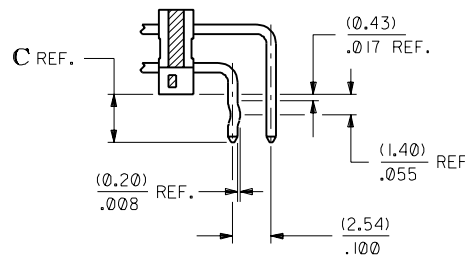
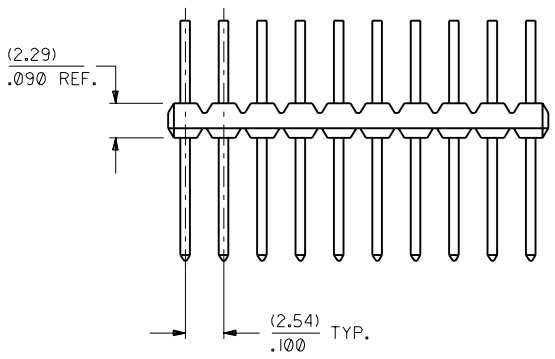
Circuits	Dimension	
	A	B
4	4.83 (.190)	2.54 (.100)
6	7.37 (.290)	5.08 (.200)
8	9.91 (.390)	7.62 (.300)
10	12.45 (.490)	10.16 (.400)
12	14.99 (.590)	12.70 (.500)
14	17.53 (.690)	15.24 (.600)
16	20.07 (.790)	17.78 (.700)
18	22.61 (.890)	20.32 (.800)
20	25.15 (.990)	22.86 (.900)
22	27.69 (1.090)	25.40 (1.000)
24	30.23 (1.190)	27.94 (1.100)
26	32.77 (1.290)	30.48 (1.200)
28	35.31 (1.390)	33.02 (1.300)

Circuits	Dimension	
	A	B
30	37.85 (1.490)	35.56 (1.400)
32	40.39 (1.590)	38.10 (1.500)
34	42.93 (1.690)	40.64 (1.600)
36	45.47 (1.790)	43.18 (1.700)
38	48.01 (1.890)	45.72 (1.800)
40	50.55 (1.990)	48.26 (1.900)
42	53.09 (2.090)	50.80 (2.000)
44	55.63 (2.190)	53.34 (2.100)
46	58.17 (2.290)	55.88 (2.200)
48	60.71 (2.390)	58.42 (2.300)
50	63.25 (2.490)	60.96 (2.400)
52	65.79 (2.590)	63.50 (2.500)
54	68.33 (2.690)	66.04 (2.600)

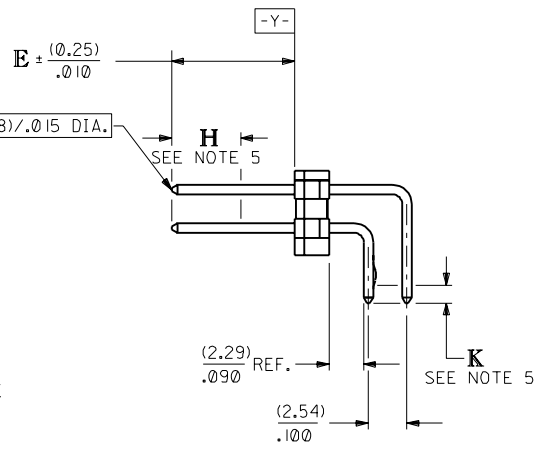
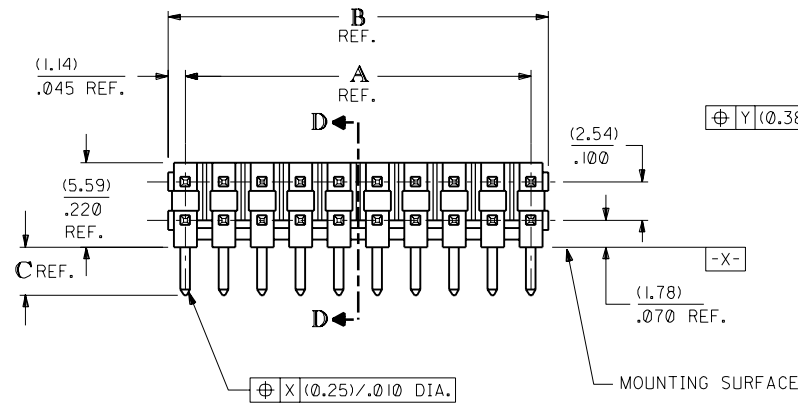
Circuits	Dimension	
	A	B
56	70.87 (2.790)	68.58 (2.700)
58	73.41 (2.890)	71.12 (2.800)
60	75.95 (2.990)	73.66 (2.900)
62	78.49 (3.090)	76.20 (3.000)
64	81.03 (3.190)	78.74 (3.100)
66	83.57 (3.290)	81.28 (3.200)
68	86.11 (3.390)	83.82 (3.300)
70	88.65 (3.490)	86.36 (3.400)
72	91.19 (3.590)	88.90 (3.500)
74	93.73 (3.690)	91.44 (3.600)
76	96.27 (3.790)	93.98 (3.700)
78	98.81 (3.890)	96.52 (3.800)
80	101.35 (3.990)	99.06 (3.900)

Plating Option	Order No.
15µL min. select Gold	• 10-97-0XX3
30µL min. select Gold	• 10-97-0XX7
150µL Tin/Lead, Nickel overall	• 10-96-4XX8
Replace XX with no. of circuits, 04-80 (even only)	

• US Standard Product, available through Molex franchised distributors



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



NO. OF CKTS.	DIM. A REF.		DIM. B REF.	
	MM	IN.	MM	IN.
4	2.54	.100	4.83	.190
6	5.08	.200	7.37	.290
8	7.62	.300	9.91	.390
10	10.16	.400	12.45	.490
12	12.70	.500	14.99	.590
14	15.24	.600	17.53	.690
16	17.78	.700	20.07	.790
18	20.32	.800	22.61	.890
20	22.86	.900	25.15	.990
22	25.40	1.000	27.69	1.090
24	27.94	1.100	30.23	1.190
26	30.48	1.200	32.77	1.290
28	33.02	1.300	35.31	1.390
30	35.56	1.400	37.85	1.490
32	38.10	1.500	40.39	1.590
34	40.64	1.600	42.93	1.690
36	43.18	1.700	45.47	1.790
38	45.72	1.800	48.01	1.890
40	48.26	1.900	50.55	1.990
42	50.80	2.000	53.09	2.090
44	53.34	2.100	55.63	2.190
46	55.88	2.200	58.17	2.290
48	58.42	2.300	60.71	2.390
50	60.96	2.400	63.25	2.490
52	63.50	2.500	65.79	2.590
54	66.04	2.600	68.33	2.690
56	68.58	2.700	70.87	2.790
58	71.12	2.800	73.41	2.890
60	73.66	2.900	75.95	2.990
62	76.20	3.000	78.49	3.090
64	78.74	3.100	81.03	3.190
66	81.28	3.200	83.57	3.290
68	83.82	3.300	86.11	3.390
70	86.36	3.400	88.65	3.490
72	88.90	3.500	91.19	3.590
74	91.44	3.600	93.73	3.690
76	93.98	3.700	96.27	3.790
78	96.52	3.800	98.81	3.890
80	99.06	3.900	101.35	3.990

NOTES:

- PIN PUSHOUT FORCE: 4 LBS. MIN. (IN EITHER DIRECTION)
- FOR ILLUSTRATION PURPOSES, 20 (DUAL 10) CIRCUIT SIZE IS SHOWN.
- PINS MUST MEET SOLDERABILITY SPEC. ES-152, EXCEPT VOIDS ARE PERMISSIBLE AT BANDOLIER PIN FAYING SURFACE. (APPROX. .025 LNG X .006 WD. REF.) - 2 LOCATIONS
- WAFER TO BE FLAT WITHIN (0.03 MM/CM)/.003 IN./IN.
- MEASURE POINT FOR PLATING THICKNESS.
- RETENTIVE PINS ARE FORMED IN SAME ROW AS SHOWN. THEY ARE LOCATED ON CONTACTS IN ROW B AND ARE EITHER THE TWO CENTER CIRCUITS OR THE CIRCUIT LEFT OF CENTER AND CENTER. SEE VIEW "AB" AND CHART FOR SPECIAL LOCATIONS.
- FOR ASSEMBLIES WITH VOIDED PINS, REFER TO DRAWING NUMBER SDA-70289-5001-9999.
- THIS PRODUCT CONFORMS TO MOLEX PRODUCT SPEC. PS-8624.
- PACKAGING INFORMATION:

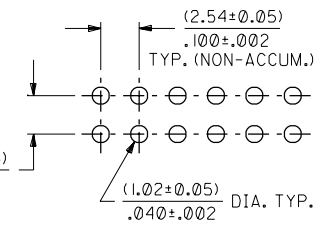
CIRCUIT SIZE	PACKAGING DRAWING
4 THRU 8	PK-70873-0353
10 AND OVER	PK-70873-0075

MATERIAL:

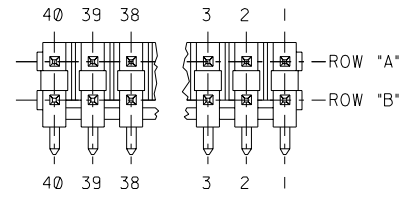
WAFER - 15% G.F. POLYESTER; 94V-0; COLOR: BLACK
PIN - PHOSPHOR BRONZE, ALLOY 510

FINISH:

- (164) - .000150 MIN. TIN/LEAD OVER .000050 MIN. NICKEL PLATE.
- (578) - .000015 MIN. GOLD PLATE IN SELECT AREA, .000150 MIN. TIN/LEAD IN SELECT AREA, OVER .000050 MIN. NICKEL OVERALL.
- (571) - .000015 MIN. GOLD PLATE IN SELECT AREA, .000075 MIN. TIN/LEAD IN SELECT AREA, OVER .000050 MIN. NICKEL OVERALL.
- (574) - .000030 MIN. GOLD PLATE IN SELECT AREA, .000075 MIN. TIN/LEAD IN SELECT AREA, OVER .000050 MIN. NICKEL OVERALL.



RECOMMENDED P.C. BOARD HOLE LAYOUT



VIEW "AB"

USE FOR LOCATING NON-STANDARD RETENTIVE PIN LOCATIONS (NUMBERING NOT MOLDED IN ON HOUSING)

C1	ADD NOTE 9 ECN UDT2000-0949 SCHAFFER 00/4/18
C	REVISED PER ECN # U70414 SCARTH 11/01/96
B	VOIDED EDP NO'S PER ECR # U60097 CAC
A	RELEASED PER ECR # U30843 REED

DIMENSIONS SHOWN (METRIC) INCH		REVISIONS	
UNLESS OTHERWISE SPECIFIED TOLERANCES ANGULAR ± 1/2°		MFG. SH. REV. LTR.	
INCH METRIC		REV. 1 OF 4	
3 PLACE ± .005	---	DATE 06/02/93	
2 PLACE ± .01	± 0.13	SHEET NO. 1 OF 4	
1 PLACE ---	± 0.25	U.S.A.	
DRAWING INFORMATION		DRAWING NO.	
DRAWN BY: SMR		SDA-70289-0001-5000	
CHECKED BY: SMR		FILE NAME: S70289X1	
SCALE: :		DIV.:	
APPROVED BY:		MOLDED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	

J	ENGINEERING NUMBER A-70289	RELEASE FOR MANUFACTURE	C				E ± (0.25) .10	RETENTIVE PIN LOCATION	PLATE PER E.S. (88)	CONNECTOR END PLATING		P.C. BOARD END PLATING		SEE PACK INFORMA. DRAWING PK-70873
			REF.							TYPE	H MEAS.	TYPE	K MEAS.	
	-0001/-0039	R.F.M.				(2.92) .115			164	TIN/LEAD	(2.54) .100	TIN/LEAD	(1.27) .050	-0047
I	-0079/-0117	R.F.M.				(2.92) .115			571	GOLD	(2.54) .100	TIN/LEAD	(1.27) .050	-0047
	-0157/-0195	R.F.M.				(2.92) .115			574	GOLD	(2.54) .100	TIN/LEAD	(1.27) .050	-0047
H	-0235/-0273	R.F.M.				(2.92) .115			578	GOLD	(3.94) .155	TIN/LEAD	(1.27) .050	-0075

G	CKTS	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	C02S
	04	10-96-4048	A-70289-0001			10-97-0043	A-70289-0079			10-97-0047	A-70289-0157			10-96-6040	A-70289-0235	04
	06	10-96-4068	A-70289-0002			10-97-0063	A-70289-0080			10-97-0067	A-70289-0158			10-96-6060	A-70289-0236	06
	08	10-96-4088	A-70289-0003			10-97-0083	A-70289-0081			10-97-0087	A-70289-0159			10-96-6080	A-70289-0237	08
	10	10-96-4108	A-70289-0004			10-97-0103	A-70289-0082			10-97-0107	A-70289-0160			10-96-6100	A-70289-0238	10
	12	10-96-4128	A-70289-0005			10-97-0123	A-70289-0083			10-97-0127	A-70289-0161			10-96-6120	A-70289-0239	12
	14	10-96-4148	A-70289-0006			10-97-0143	A-70289-0084			10-97-0147	A-70289-0162			10-96-6140	A-70289-0240	14
	16	10-96-4168	A-70289-0007			10-97-0163	A-70289-0085			10-97-0167	A-70289-0163			10-96-6160	A-70289-0241	16
	18	10-96-4188	A-70289-0008			10-97-0183	A-70289-0086			10-97-0187	A-70289-0164			10-96-6180	A-70289-0242	18
F	20	10-96-4208	A-70289-0009			10-97-0203	A-70289-0087			10-97-0207	A-70289-0165			10-96-6200	A-70289-0243	20
	22	10-96-4228	A-70289-0010			10-97-0223	A-70289-0088			10-97-0227	A-70289-0166			10-96-6220	A-70289-0244	22
	24	10-96-4248	A-70289-0011			10-97-0243	A-70289-0089			10-97-0247	A-70289-0167			10-96-6240	A-70289-0245	24
	26	10-96-4268	A-70289-0012			10-97-0263	A-70289-0090			10-97-0267	A-70289-0168			10-96-6260	A-70289-0246	26
	28	10-96-4288	A-70289-0013			10-97-0283	A-70289-0091			10-97-0287	A-70289-0169			10-96-6280	A-70289-0247	28
	30	10-96-4308	A-70289-0014			10-97-0303	A-70289-0092			10-97-0307	A-70289-0170			10-96-6300	A-70289-0248	30
	32	10-96-4328	A-70289-0015			10-97-0323	A-70289-0093			10-97-0327	A-70289-0171			10-96-6320	A-70289-0249	32
E	34	10-96-4348	A-70289-0016			10-97-0343	A-70289-0094			10-97-0347	A-70289-0172			10-96-6340	A-70289-0250	34
	36	10-96-4368	A-70289-0017			10-97-0363	A-70289-0095			10-97-0367	A-70289-0173			10-96-6360	A-70289-0251	36
	38	10-96-4388	A-70289-0018			10-97-0383	A-70289-0096			10-97-0387	A-70289-0174			10-96-6380	A-70289-0252	38
	40	10-96-4408	A-70289-0019			10-97-0403	A-70289-0097			10-97-0407	A-70289-0175			10-96-6400	A-70289-0253	40
	42	10-96-4428	A-70289-0020			10-97-0423	A-70289-0098			10-97-0427	A-70289-0176			10-96-6420	A-70289-0254	42
	44	10-96-4448	A-70289-0021			10-97-0443	A-70289-0099			10-97-0447	A-70289-0177			10-96-6440	A-70289-0255	44
	46	10-96-4468	A-70289-0022			10-97-0463	A-70289-0100			10-97-0467	A-70289-0178			10-96-6460	A-70289-0256	46
D	48	10-96-4488	A-70289-0023			10-97-0483	A-70289-0101			10-97-0487	A-70289-0179			10-96-6480	A-70289-0257	48
	50	10-96-4508	A-70289-0024			10-97-0503	A-70289-0102			10-97-0507	A-70289-0180			10-96-6500	A-70289-0258	50
	52	10-96-4528	A-70289-0025			10-97-0523	A-70289-0103			10-97-0527	A-70289-0181			10-96-6520	A-70289-0259	52
	54	10-96-4548	A-70289-0026			10-97-0543	A-70289-0104			10-97-0547	A-70289-0182			10-96-6540	A-70289-0260	54
	56	10-96-4568	A-70289-0027			10-97-0563	A-70289-0105			10-97-0567	A-70289-0183			10-96-6560	A-70289-0261	56
	58	10-96-4588	A-70289-0028			10-97-0583	A-70289-0106			10-97-0587	A-70289-0184			10-96-6580	A-70289-0262	58
	60	10-96-4608	A-70289-0029			10-97-0603	A-70289-0107			10-97-0607	A-70289-0185			10-96-6600	A-70289-0263	60
	62	10-96-4628	A-70289-0030			10-97-0623	A-70289-0108			10-97-0627	A-70289-0186			10-96-6620	A-70289-0264	62
C	64	10-96-4648	A-70289-0031			10-97-0643	A-70289-0109			10-97-0647	A-70289-0187			10-96-6640	A-70289-0265	64
	66	10-96-4668	A-70289-0032			10-97-0663	A-70289-0110			10-97-0667	A-70289-0188			10-96-6660	A-70289-0266	66
	68	10-96-4688	A-70289-0033			10-97-0683	A-70289-0111			10-97-0687	A-70289-0189			10-96-6680	A-70289-0267	68
	70	10-96-4708	A-70289-0034			10-97-0703	A-70289-0112			10-97-0707	A-70289-0190			10-96-6700	A-70289-0268	70
	72	10-96-4728	A-70289-0035			10-97-0723	A-70289-0113			10-97-0727	A-70289-0191			10-96-6720	A-70289-0269	72
	74	10-96-4748	A-70289-0036			10-97-0743	A-70289-0114			10-97-0747	A-70289-0192			10-96-6740	A-70289-0270	74
	76	10-96-4768	A-70289-0037			10-97-0763	A-70289-0115			10-97-0767	A-70289-0193			10-96-6760	A-70289-0271	76
	78	10-96-4788	A-70289-0038			10-97-0783	A-70289-0116			10-97-0787	A-70289-0194			10-96-6780	A-70289-0272	78
B	80	10-96-4808	A-70289-0039			10-97-0803	A-70289-0117			10-97-0807	A-70289-0195			10-96-6800	A-70289-0273	80

A	DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES ANGULAR ± 1/2°										▽ = 0	▼ = 0	REVISE ONLY ON CAD SYSTEM							
											TITLE SALES ASS'Y - DUAL ROW WAFER RIGHT ANGLE/.025 SQ. PINS/.100 GRID WITH RETENTION PINS ON CENTER		FILE NAME S70289X2	DATE 06/02/93						
											3 PLACE ±		MOLEX INCORPORATED SHEET NO. DATE 135LEJLL U.S.A. 2 06/02/93							
											2 PLACE ±		PART NO. DRWG. NO. SEE CHART SDA-70289-0001-5000							
											1 PLACE ±		FILE NAME S70289X2							
											DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							
											DRWG. BY SMR	CHK'D BY SMR	DIV. 5122 DA C							
	L.T.R.					REVISIONS					L.T.R.					REVISIONS				