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Part Number: [0444751821](#)
Status: **Active**
Description: 4.20mm (.165") Pitch Mini-Fit, HCS™ Receptacle Header, Dual Row, Vertical, Blind Mating, with Snap-in Plastic Pegs, 18 Circuits

Documents:

[3D Model](#) [Product Specification PS-44476-001 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

General

Product Family	PCB Receptacles
Series	44475
Application	Board-to-Board
Application	Wire-to-Board
Comments	Solder Type With Pegs
Product Name	Mini-Fit HCS™

Physical

Circuits (Loaded)	18
Color - Resin	Natural (White)
Durability (mating cycles max)	30
Flammability	94V-0
Glow-Wire Compliant	No
Material - Metal	Copper
Material - Plating Mating	Tin
Material - Plating Termination	Tin
Material - Resin	Nylon
Number of Rows	2
Orientation	Vertical
PCB Locator	Yes
PCB Retention	Yes
PCB Thickness Recommended (in)	0.070 In
PCB Thickness Recommended (mm)	1.80 mm
Packaging Type	Tray
Pitch - Mating Interface (in)	0.165 In
Pitch - Mating Interface (mm)	4.20 mm
Plating min: Mating (µin)	100
Plating min: Mating (µm)	2.50
Plating min: Termination (µin)	100
Plating min: Termination (µm)	2.50
Polarized to PCB	Yes
Surface Mount Compatible (SMC)	No
Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Through Hole

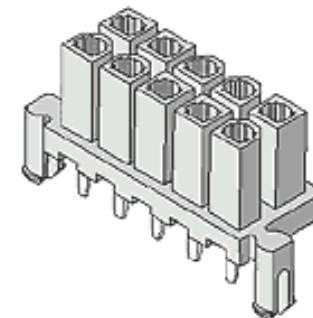
Electrical

CSA	LR19980
Current - Maximum	9A
UL	E29179
Voltage - Maximum	600V

Material Info

Reference - Drawing Numbers

Product Specification	PS-44476-001
Sales Drawing	SDA-44475-****



Series image - Reference only

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
Please visit the [Contact Us](#) section for any non-product compliance questions.

Duration at Max.	5
Process Temperature (seconds)	
Lead-free Process Capability	Wave Capable (TH only)
Max. Cycles at Max.	1
Process Temperature	
Process Temperature max. C	240

Search Parts in this Series

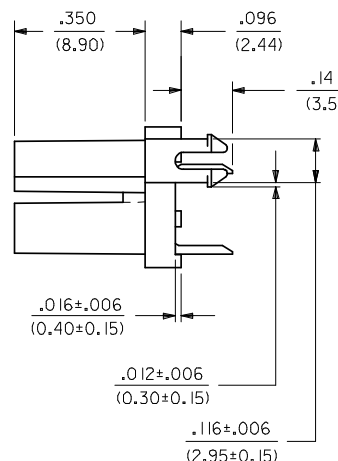
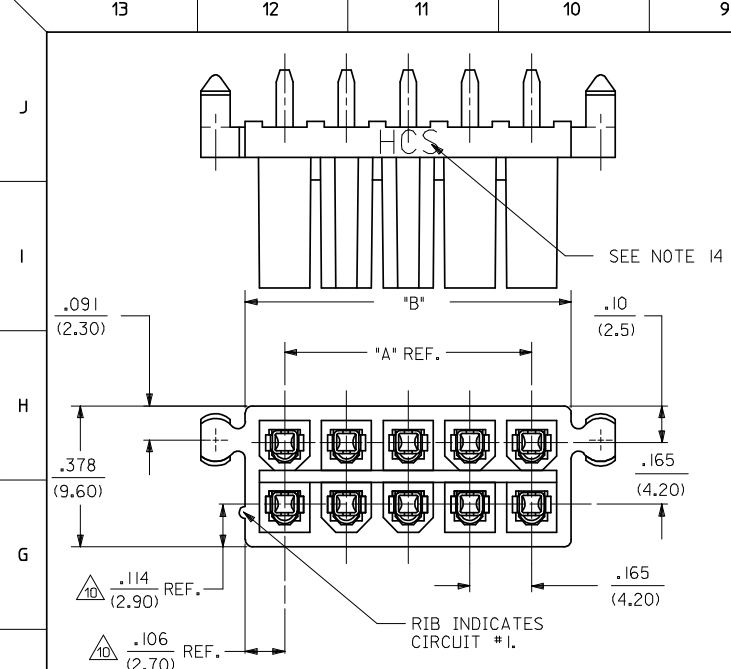
[44475 Series](#)

Mates With

[44068](#) , [42404](#) , [44474](#) , [43810](#) , [42475](#)

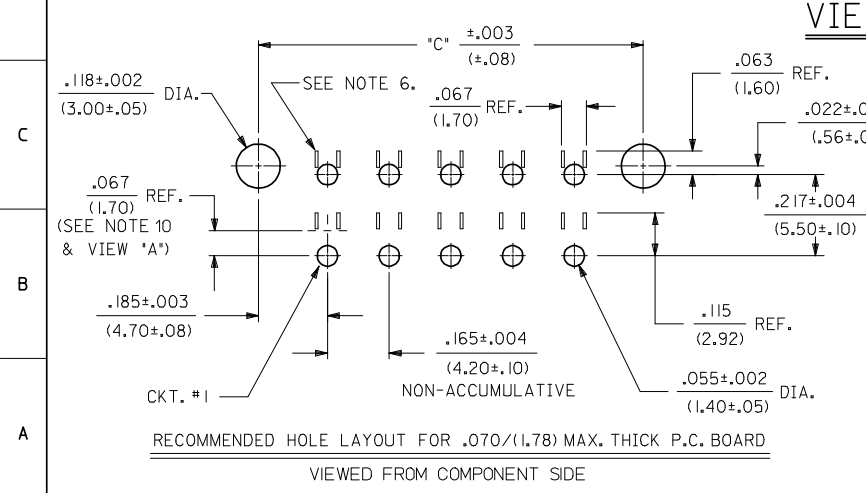
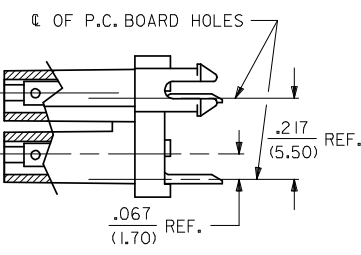
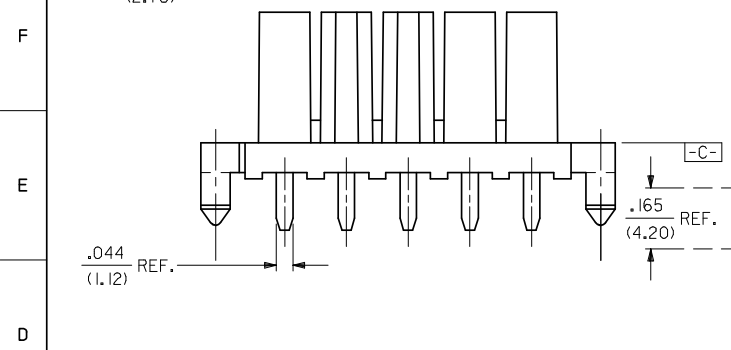
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- LEGEND:**
- 44475 - * * * *
- BASE NUMBER
CIRCUIT SIZE (02-24)
HOUSING MATERIAL (SEE NOTE 1.)
PLATING (SEE NOTE 2.)
- NOTES:**
- HOUSING MATERIAL
1 - NYLON 6/6, U.L. 94V-2, COLOR NATURAL.
2 - NYLON 6/6, U.L. 94V-0, COLOR NATURAL.
TERMINAL MATERIAL C197 ALLOY.
 - TERMINAL PLATING
1 - POSTPLATE .000100/(.00254) MIN. BRIGHT TIN OVER .000050/(.00127) MIN. NICKEL.
2 - .000030/(.00080) MIN. SELECT GOLD, .000100/(.00254) MIN. MATT TIN OVER .000050/(.00127) MIN. NICKEL OVERALL.
 - PRODUCT SPECIFICATION AND PROCESSING PARAMETERS PS-44476-0002.
 - PACKAGING SPECIFICATION: PK-42385-999.
 - PART MATES WITH MINI-FIT B.M.I. PLUG #42475, HEADER #42404, AND H.C.A. VERT. HEADER #44474.
 - PHANTOM LINES INDICATE AREAS WHERE TERMINAL STANDOFFS CONTACT P.C. BOARD.
A MAXIMUM TOLERANCE OF .050/(1.27) ALLOWS FOR 2 POINTS OF ELECTRICAL CONTACT. A MAXIMUM TOLERANCE OF .020/(.51) ALLOWS FOR 4 POINTS OF CONTACT.
 - .016 IN/IN OR .016 MM/MM MAX. BOW ALLOWABLE AT DATUM [-C-]
 - PART ALLOWS FOR UP TO .100/(2.54) MISALIGNMENT WITH MATING CONNECTOR.
 - DIMENSION TO BE USED FOR ALIGNMENT OF CIRCUIT #1 OF MATING CONNECTOR.
 - CONNECTOR ASSEMBLIES ARE NOT TO BE MATED OR UNMATED WHILE CIRCUITS ARE LIVE.
 - PARTS NOT DESIGNED FOR CURRENT SHARING.
 - ITEM NUMBERS PRECEDED BY AN 'X' IN THE CHARTS ON SHEET 3 ARE NOT AVAILABLE.
 - PARTS PRODUCED AFTER JULY 1, 2004 WILL HAVE 'HCS' MARKING INSTEAD OF BLACK STRIPE.
 - WHEN THIS PRODUCT IS USED IN A BLIND MATING APPLICATION, THE SYSTEM LEVEL DESIGN MUST INCORPORATE GUIDANCE SO THE CONNECTORS ARE WITHIN THE CAPTURE ENVELOPE OF THE FLANGES ON THE HEADER OR PLUG HOUSING AND CAN THUS ALIGN THEMSELVES AS THEY COME TOGETHER. FLOAT IS ALSO REQUIRED IN THE OVERALL DESIGN TO ALLOW THE PCB RECEPTACLE OR ITS MATE TO MOVE INTO A STRESS-FREE POSITION AFTER MATING.
 - PARTS CONFORM TO CLASS 'B' REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

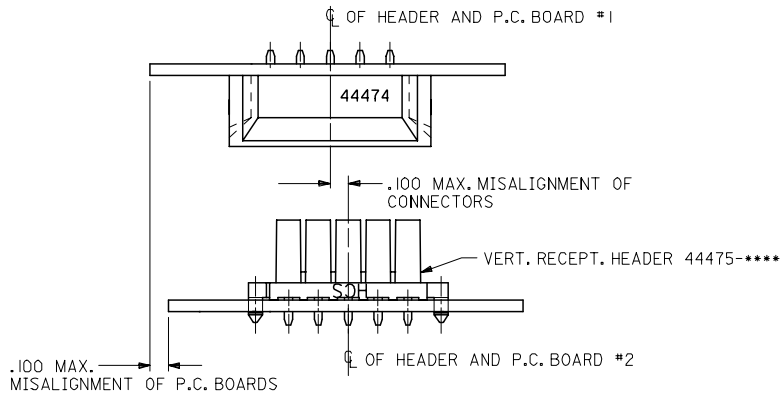
CIRCUIT SIZE	DIM. "A"	DIM. "B"	DIM. "C"
2	—	.21 (5.4)	.370 (9.40)
4	.165 (4.20)	.38 (9.6)	.535 (13.60)
6	.331 (8.40)	.54 (13.8)	.701 (17.80)
8	.496 (12.60)	.71 (18.0)	.866 (22.00)
10	.661 (16.80)	.87 (22.2)	1.031 (26.20)
12	.827 (21.00)	1.04 (26.4)	1.197 (30.40)
14	.992 (25.20)	1.20 (30.6)	1.362 (34.60)
16	1.157 (29.40)	1.37 (34.8)	1.528 (38.80)
18	1.323 (33.60)	1.54 (39.0)	1.693 (43.00)
20	1.488 (37.80)	1.70 (43.2)	1.858 (47.20)
22	1.654 (42.00)	1.87 (47.4)	2.024 (51.40)
24	1.819 (46.20)	2.03 (51.6)	2.189 (55.60)



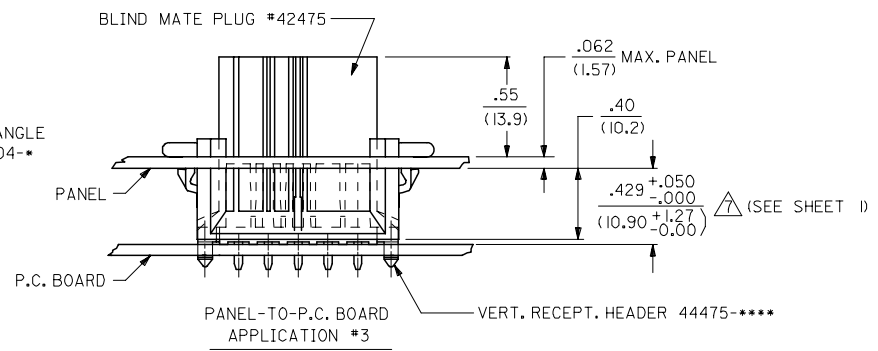
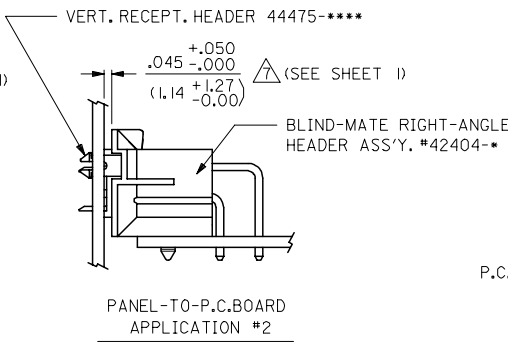
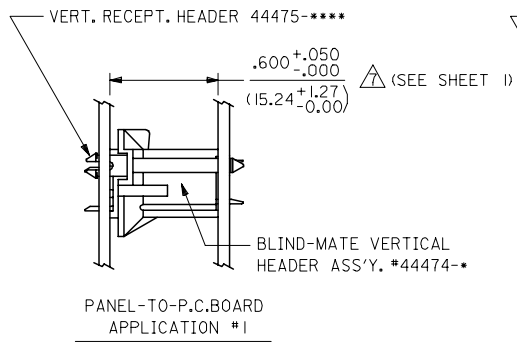
VIEW "A"

ADDED NOTE 16	DESCRIPTION	QUALITY SYMBOLS
EC NO: UCP2009-0054	2008/07/21	▽=0
DRWN:GAVRILL	2008/07/21	▽=0
CHKD:JBELL	2008/07/21	
APPR:FSMITH	2008/07/28	
REV		

GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		IN/MM		4:1	METRIC		
4 PLACES	± --- ± ---	DRAWN BY	DATE	TITLE VERT HEADER RECEPT ASSY BLIND MATE MINI-FIT HCS SERIES MOLEX INCORPORATED			
3 PLACES	± --- ± .010	GEP	1994/08/10				
2 PLACES	± 0.25 ± .015	CHECKED BY	DATE				
1 PLACE	± 0.38 ± ---	RJF	1994/08/10				
ANGULAR ± 5 °		APPROVED BY	DATE				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		RJF		1994/08/10	DOCUMENT NO. SDA-44475-****		
		MATERIAL NO.		SHEET NO.			
		SEE SHEET 3		1 OF 3			
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							



ALIGNMENT TOLERANCES FOR .100 MAX. BOARD-TO-BOARD MISALIGNMENT
(NO CONNECTOR FLOAT)



SEE NOTE 15

SEE SHEET 1 FC NO: UCP2006-2258 DRWN:ADRAINOL 2006/04/11 CHKD:GOLGAR 2006/04/11 APPR:ICOMERCJ 2006/04/12 C1	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± ---	3 PLACES ± --- ± .015	DRAWN BY GEP	DATE 1994/08/10	TITLE VERT HEADER RECEPT ASSY BLIND MATE MINI-FIT HCS SERIES			
		2 PLACES ± 0.38 ± ---	1 PLACE ± --- ± ---	CHECKED BY RJF	DATE 1994/08/10	APPROVED BY RJF			
		ANGULAR ±1/2°		MATERIAL NO. DATE 1994/08/10		MOLEX INCORPORATED			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				SEE SHEET 3		DOCUMENT NO. SDA-44475-****		SHEET NO. 2 OF 3	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									

	13	12	11	10	9	8	7	6	44475	4	3	2	1
	ITEM NUMBER	CKT. SIZE	HOUSING MATERIAL	PLATING (SEE NOTE 2)	ITEM NUMBER	CKT. SIZE	HOUSING MATERIAL	PLATING (SEE NOTE 2)					
J	X 44475-0211	2	94V-2	I	X 44475-0222	2	94V-0	2					
	↑ -0411	4	↑	↑	X ↑ -0422	4	↑	↑					
	-0611	6			X -0622	6							
I	X -0811	8			X -0822	8							
	-1011	10			X -1022	10							
	X -1211	12			X -1222	12							
	-1411	14			X -1422	14							
	X -1611	16			X -1622	16							
H	-1811	18			-1822	18							
	X -2011	20			X -2022	20							
	X ↓ -2211	22	↓	↓	X ↓ -2222	22	↓	↓					

	44475-2411	24	94V-2	I	X 44475-2422	24	94V-0	2					
G	X 44475-0221	2	94V-0	I									
	↑ -0421	4	↑	↑									
	-0621	6											
F	X -0821	8											
	-1021	10											
	X -1221	12											
	-1421	14											
	-1621	16											
E	-1821	18											
	X -2021	20											
	X ↓ -2221	22	↓	↓									
D	44475-2421	24	94V-0	I									

ITEM. NO.	CKT. SIZE	HSG. MAT'L.	TERMINAL PLATING REQUIRED AT EACH CIRCUIT LOCATION:																							
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
44475-3000	24	94V-0	A	A	-	A	-	A	-	A	-	A	A	A	A	A	-	A	-	A	-	A	-	A	A	A

ITEMS PRECEDED BY "X" ARE NOT AVAILABLE.

DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2°		▽ = 0	▼ = 0	REVISE ONLY ON CAD SYSTEM
3 PLACE ± --- ± --- 2 PLACE ± -- ± --- 1 PLACE --- ± --		TITLE VERTICAL RECEPTACLE HEADER ASS'Y., B.M.I., MINI-FIT H.C.S. SERIES)		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MOLEX INCORPORATED U.S.A. SHEET NO. 3 DATE 8/10/94		
DRWG. BY: GEP APP'D. BY: RJF		PART NO. SDA-44475-**** DRWG. NO. SEE CHART.		
LTR. REVISIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		