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Part Number: [0908583492](#)
Status: **Active**
Overview: [rast 5 connector system](#)
Description: 5.00mm (.197") Pitch Appli-Mate RAST 5 Header, Vertical, 6 Circuits, Silver Plating, Reference K46

Documents:

[3D Model](#) [Product Specification PS-99020-0037 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)
[Packaging Specification \(PDF\)](#)

Agency Certification

CSA LR19980
 UL E29179

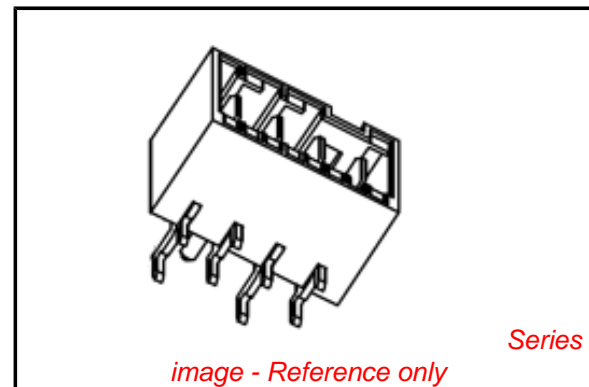
General

Product Family PCB Headers
 Series [90858](#)
 Application Wire-to-Board
 Overview [rast 5 connector system](#)
 Product Name RAST 5

Physical

Breakaway No
 Circuits (Loaded) 6
 Circuits (maximum) 6
 Color - Resin Natural
 Durability (mating cycles max) 10
 First Mate / Last Break No
 Flammability 94V-0
 Glow-Wire Compliant No
 Guide to Mating Part No
 Keying to Mating Part None
 Lock to Mating Part None
 Material - Metal Brass
 Material - Plating Mating Silver
 Material - Plating Termination Silver
 Number of Rows 1
 Orientation Vertical
 PC Tail Length (in) 0.138 In
 PC Tail Length (mm) 3.50 mm
 PCB Locator Yes
 PCB Retention None
 PCB Thickness Recommended (in) 0.055 In
 PCB Thickness Recommended (mm) 1.40 mm
 Packaging Type Bag
 Pitch - Mating Interface (in) 0.197 In
 Pitch - Mating Interface (mm) 5.00 mm
 Polarized to PCB Yes
 Shrouded Fully
 Stackable Yes
 Surface Mount Compatible (SMC) No
 Temperature Range - Operating -20°C to +85°C
 Termination Interface: Style Through Hole

Electrical



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

[90858Series](#)

Mates With

Appli-Mate 5.0 IDT Connector System
 Female Receptacle [90835](#) , [90833](#)

Current - Maximum per Contact	16A
Voltage - Maximum	250V

Material Info

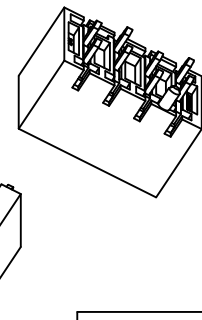
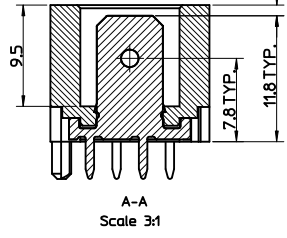
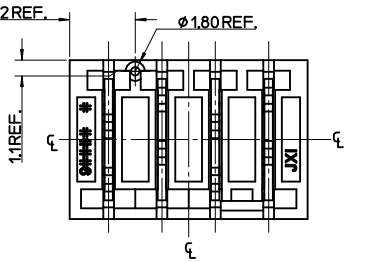
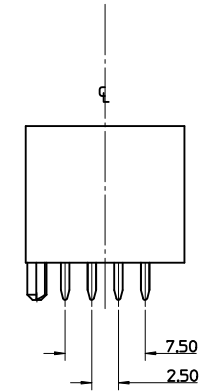
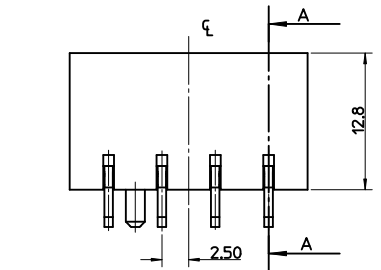
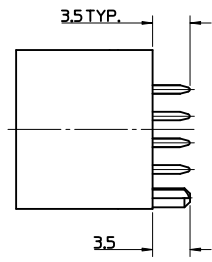
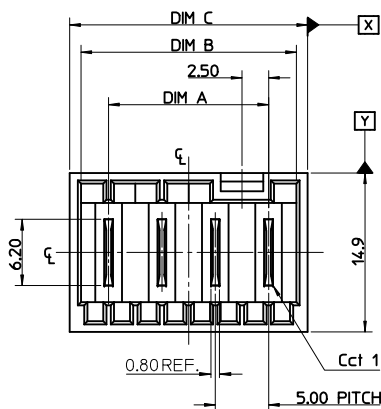
Reference - Drawing Numbers

Packaging Specification	PK-90858-001
Product Specification	PS-99020-0037
Sales Drawing	SD-90858-001

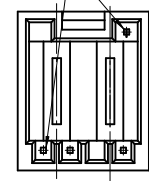
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13 12 11 10 9 8 7 6 5 4 3 2 1



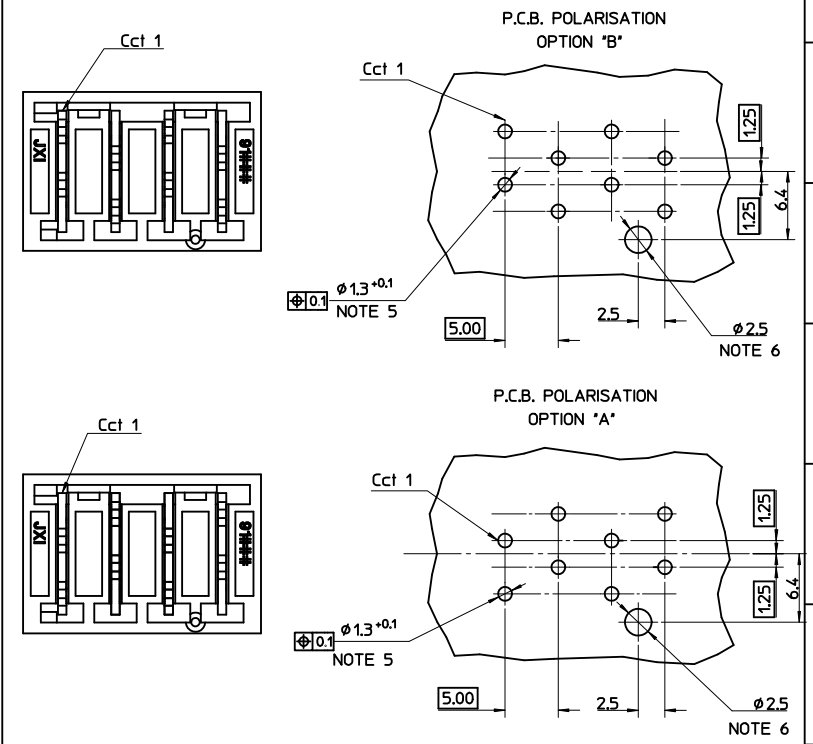
HOLES ON SOME TOOLED VERSIONS



CCT	DIM A	DIM B	DIM C	TOL
2	5.00	10.20	12.30	
3	10.00	15.20	17.30	
4	15.00	20.20	22.30	
5	20.00	25.20	27.30	
6	25.00	30.20	32.30	+/-0.30
7	30.00	35.20	37.30	
8	35.00	40.20	42.30	
9	40.00	45.20	47.30	
10	45.00	50.20	52.30	
11	50.00	55.20	57.30	
12	55.00	60.20	62.30	

- NOTES:
- MATERIALS
 HOUSING: 30% GLASS-FILLED PBT, UL94 V-0
 TERMINAL: BRASS 0.80REF. THICK
 PLATING: OPTIONAL (SEE CHARTS SHEETS 2-9)
 5µm TIN OVER
 2.5µm NICKEL ALLOVER
 SELECTIVE SILVER
 2µm MIN SILVER
 2.5µm NICKEL ALLOVER
 - PRODUCT CONFORMS TO SPECIFICATION PS-99020-0037
 - MATES WITH MOLEX 91338, 90833, 90835, 91777, 91778 & 91779
 - PARTS PACKAGED LOOSE IN PLASTIC BAGS
 - PLATED THRU HOLE
 - NON-PLATED THRU HOLE
 - RECOMMENDED PCB THICKNESS: 1.4±0.1mm
 - PCB VIEW IS FROM SOLDER SIDE

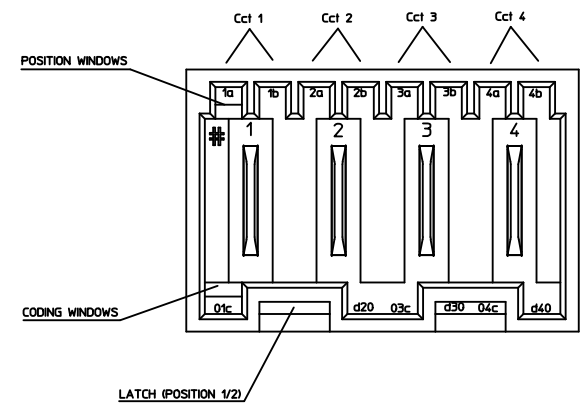
RECOMMENDED PCB LAYOUT



MOULD PROCESS CHANGE EC NO: E2010-0370 DRAWN: BRUTTLE 2010/05/13 CHKD: IDENEY 2004/05/27 APPR: BMAGUIRE 2010/06/08	QUALITY SYMBOLS ◻=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± --- 3 PLACES ± 0.1 ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± 0.2 ± ---	mm INCH ± --- ± --- ± 0.1 ± --- ± 0.2 ± ---	DRAWN BY NMCNAMAR	DATE 2004/05/26	TITLE RAST 5 VERT HDR		MOLEX MOLEX INCORPORATED	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SIZE A2	MATERIAL NO. SD-SHEETS 2-7		APPROVED BY BMAGUIRE	DATE 2004/05/28	DOCUMENT NO. SD-90858-001		SHEET NO. 1 OF 7	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									

12 11 10 9 8 7 6 5 4 3 2 1

2 CIRCUIT		SEE CODE DESIGNATION TABLE FOR NUMBERING FORMAT WHEN ADDING NEW PART NUMBERS						P.C.B. POLARISATION OPTION
PART NO. (TIN)	CLOUR	UNBLOCKED POSITION KEYS	UNBLOCKED CODING KEYS	LATCH POSITION	CONFIGURATION (SEE NOTES)	REF	PART NO. (SILVER)	
90858-0003	NATURAL	1b 2a	01c d20	1/2		K01	90858-0499	A
90858-0004	NATURAL	1a 2b	01c	1/2		K02	90858-0482	A
90858-0007	NATURAL	1b 2b	01c	1/2		K09	90858-0497	A
90858-0018	NATURAL	2a	01c, d20	1/2		K03	90858-0495	A
90858-0019	NATURAL	1a 2b	d20	1/2		K05	90858-0478	A
90858-0021	NATURAL	1b	01c, d20	1/2		K16	90858-0492	A
90858-0022	NATURAL	1a 2b	NONE	1/2		K06	90858-0491	A
90858-0027	NATURAL	2b	NONE	1/2		K11	90858-0487	A
90858-0029	NATURAL	1a 1b	d20	1/2		K13	90858-0486	A
90858-0030	NATURAL	2a 2b	NONE	1/2		K31	90858-0485	A
90858-0032	NATURAL	2b	d20	1/2		K38	90858-0484	A
90858-0047	NATURAL	1a 2a	01c d20	1/2		K44	90858-0483	A
90858-0055	NATURAL	1a 1b	NONE	1/2		K40	90858-0480	A
90858-0020	NATURAL	1a 1b	01c	1/2		K04	90858-0475	A
90858-0054	NATURAL	2b	01c d20	1/2		K15	90858-0476	A
90858-0057	NATURAL	1a	01c d20	1/2		K12	90858-0477	A
90858-0058	NATURAL	1a 2a	01c	1/2		K10	90858-0472	A
90858-0059	NATURAL	ALL	d20	1/2		K34	90858-0474	A
90858-0060	NATURAL	1b 2a 2b	d20	1/2		K07	90858-0473	A
90858-0061	NATURAL	1b 2a	01c d20	1/2		K01	90858-0471	B



KEYING, CODING & LATCH POSITION
(4CCT EXAMPLE SHOWN)
VIEW INMATING DIRECTION

SEE SHEET 1 EC NO: E2010-0370 DRN:BRUTTE CHKD:JDENNEY APPR:BMAGUIRE 2010/05/13 2004/05/27 2010/06/08	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	$\nabla=0$ $\nabla=0$	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.1 ± --- 1 PLACE ± 0.2 ± --- ANGULAR ± 2 °	MM ONLY DRAWN BY DATE NMCNAR 2004/05/26 CHECKED BY DATE JDENNEY 2004/05/27 APPROVED BY DATE BMAGUIRE 2004/05/28	1:1	METRIC	<input checked="" type="checkbox"/> THIRD ANGLE PROJECTION	
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE CHART THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	MATERIAL NO. SD-90858-001	DOCUMENT NO. SD-90858-001	SHEET NO. 2 OF 7	RAST 5 VERT HDR MOLEX INCORPORATED	

3 CIRCUIT

SEE CODE DESIGNATION TABLE FOR NUMBERING
FORMAT WHEN ADDING NEW PART NUMBERS

PART NO. (TIN)	COLOUR	UNBLOCKED POSITION KEYS	UNBLOCKED CODING KEYS	LATCH POSITION	CONFIGURATION (SEE NOTES)	REF	PART NO. (SILVER)	P.C.B. POLARISATION OPTION
90858-0502	NATURAL	1b	01c, d20	1/2		K01	90858-1249	A
90858-0508	NATURAL	1a	03c	1/2		K04	90858-1248	A
90858-0511	NATURAL	1a 1b	d30	1/2		K05	90858-1247	A
90858-0512	NATURAL	1a 3b	01c	1/2		K06	90858-1246	A
90858-0513	NATURAL	1b	d20 03c	1/2		K09	90858-1245	A
90858-0524	NATURAL	1b 2a 2b	d30	1/2		K33	90858-1244	A
90858-0525	NATURAL	2b	d20	1/2		K56	90858-1243	A
90858-0528	NATURAL	ALL	d10 d30	2/3		K38	90858-1242	A
90858-0527	NATURAL	ALL	d20	1/2		K40	90858-1240	A
90858-0526	NATURAL	2b 3b	d10 02c	2/3		K02	90858-1241	A
90858-0529	NATURAL	1b	01c d20	1/2			90858-1239	A
90858-0530	NATURAL	3b	d10, d30	2/3			90858-1238	A
90858-0531	NATURAL	3b	01c, d30	2/3			90858-1237	A
90858-0532	NATURAL	3b	d10, 02c	2/3			90858-1236	A

4 CIRCUIT

SEE CODE DESIGNATION TABLE FOR NUMBERING
FORMAT WHEN ADDING NEW PART NUMBERS

PART NO. (TIN)	COLOUR	UNBLOCKED POSITION KEYS	UNBLOCKED CODING KEYS	LATCH POSITION	CONFIGURATION (SEE NOTES)	REF	PART NO. (SILVER)	P.C.B. POLARISATION OPTION
90858-1254	NATURAL	1b	03c d40	1/2 3/4		K01	90858-1999	A
90858-1264	NATURAL	1a 4b	d40	1/2 3/4		K03	90858-1998	A
90858-1265	NATURAL	2a 4b	d20	1/2 3/4		K07	90858-1996	A
90858-1267	NATURAL	1b 2a 3a 4b	01c d40	1/2 3/4		K37	90858-1994	A
90858-1270	NATURAL	1a 2b 4b	01c 03c d40	1/2 3/4		K44	90858-1993	A
90858-1274	NATURAL	1a 3a 3b	01c d20 d40	1/2 3/4		K32	90858-1992	A
90858-1275	NATURAL	1b 2a 4b	01c d20 03c	1/2 3/4		K61	90858-1991	A
90858-1278	NATURAL	1a 3a	d40	1/2 3/4		K06	90858-1987	A
90858-1280	NATURAL	1a 2b 3b 4a	01c 03c d40	1/2 3/4		K65	90858-1988	A
90858-1281	NATURAL	2a 4b	d20 03c	1/2 3/4		K30	90858-1986	A
90858-1282	NATURAL	3b	d30	2/3		K04	90858-1985	A
90858-1283	NATURAL	1b 2a 4b	01c d20 03c d40	1/2 3/4		N/A	90858-1984	A
90858-1284	NATURAL	2a 3a 3b 4b	01c d20 03c d40	1/2 3/4		N/A	90858-1983	A

SEE SHEET 1 EEC NO: E2010-0370 DRAWN BY: DRWNBRUTLE CHECKED BY: CHKD.DENNEHY APPROVED BY: APPR.BMAGUIRE 2010/05/13 2004/05/27 2010/06/08	QUALITY SYMBOLS 	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.1 ± --- 1 PLACE ± 0.2 ± --- ANGULAR ± 2 °		DIMENSION STYLE MM ONLY DRAWN BY: NMCNAMAR CHECKED BY: JDENNEHY APPROVED BY: BMAGUIRE DATE: 2004/05/26 DATE: 2004/05/27 DATE: 2004/05/28		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION 	TITLE RAST 5 VERT HDR	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		MATERIAL NO. SD-90858-001		MOLEX INCORPORATED		SHEET NO. 3 OF 7
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION								DOCUMENT NO.
										SHEET NO.

9 CIRCUIT							SEE CODE DESIGNATION TABLE FOR NUMBERING FORMAT WHEN ADDING NEW PART NUMBERS		P.C.B. POLARISATION OPTION
PART NO. (TIN)	COLOUR	UNBLOCKED POSITION KEYS	UNBLOCKED CODING KEYS	LATCH POSITION	CONFIGURATION (SEE NOTES)	REF	PART NO. (SILVER)		
90858-5002	NATURAL	1a 2a 2b 3a 3b 6a 7a 8b 9b	d20 03c d40 d50 d90	1/2 3/4 6/7 7/8 8/9		K30	90858-5997	A	
90858-5003	NATURAL	1b 2a 3b 5a 6a 7b 8a 8b	01c 03c d70 08c	1/2 3/4 6/7 8/9		K31	90858-5996	A	
90858-5004	NATURAL	1b 2a 3a 5a 6a 7b 8b	01c 03c d70 08c d90	1/2 3/4 6/7 8/9		K32	90858-5995	A	
90858-5005	NATURAL	1a 1b 3a 4b 5a 6b 7a	01c d40 09c	1/2 3/4 5/6 7/8		K37	90858-5994	A	
90858-5006	NATURAL	1b 5a 8a 9a	03c d40 d60 08c	1/2 3/4 5/6 8/9		K38	90858-5993	A	
90858-5007	NATURAL	2a 4b 5a 6b 7a 9a	d20 05c 07c	1/2 3/4 5/6 7/8		K39	90858-5992	A	
90858-5009	NATURAL	5b	d30 d70	1/2 6/7		K04	90858-5989	A	
90858-5012	NATURAL	2b 3b 4a 5a 6b	d10 02c 04c 08c d90	2/3 4/5 6/7 8/9		K40	90858-5988	A	
90858-5011	NATURAL	2b 5a	d80	2/3 7/8		K03	90858-5987	A	
90858-5010	NATURAL	2b 3b 4b 6a	01c d20 d40 05c d90	1/2 3/4 6/7 8/9		K49	90858-5986	A	
90858-5013	NATURAL	1b 2a 4b 5a 8b 9b	01c d20 d70 08c	1/2 4/5 6/7 8/9		K58	90858-5985	A	

10 CIRCUIT							SEE CODE DESIGNATION TABLE FOR NUMBERING FORMAT WHEN ADDING NEW PART NUMBERS		P.C.B. POLARISATION OPTION
PART NO. (TIN)	COLOUR	UNBLOCKED POSITION KEYS	UNBLOCKED CODING KEYS	LATCH POSITION	CONFIGURATION (SEE NOTES)	REF	PART NO. (SILVER)		
90858-6002	NATURAL	2a 3b 6a 9a	03c d80	1/2 4/5 6/7 9/10		K30	90858-6997	A	
90858-6003	NATURAL	1a 3b 7b 9b	01c d20 d40 05c 07c	1/2 3/4 5/6 7/8 9/10		K35	90858-6996	A	
90858-6009	NATURAL	1b 2a 2b 4a 5b 6a 8a 9a 10a	d30 04c 06c 09c	1/2 4/5 6/7 9/10		K41	90858-6988	A	
90858-6010	NATURAL	1a 3b 4b 8a 10a 10b	01c d50 06c 07c d80 09c	1/2 4/5 7/8 9/10		K42	90858-6987	A	
90858-6012	NATURAL	2a 4b 8a 10a	d20 05c d70 08c	1/2 3/4 5/6 8/9		K44	90858-6986	A	
90858-6015	NATURAL	1b 2a 3a 4b 5b 9a	01c d40 d60 07c 09c d100	1/2 3/4 5/6 7/8 9/10		K48	90858-6983	A	
90858-6016	NATURAL	1a 4b 6b 9a	03c 04c d50 06c d70 08c d90	1/2 4/5 6/7 8/9		K36	90858-6982	A	
90858-6021	NATURAL	1a 3b 7b 8a	01c d20 d40 05c d100	1/2 3/4 5/6 7/8 9/10		K33	90858-6977	A	
90858-6022	NATURAL	10a	d20 08c	1/2 9/10		K56	90858-6976	A	
90858-6023	NATURAL	1b 3b 5b 9a	01c d60 07c 09c d100	1/2 3/4 5/6 7/8 9/10		K36	90858-6975	A	
90858-6024	NATURAL	1b 2b 4a 7a 9a 9b	d20 d30 d50 06c d70 d80	1/2 4/5 6/7 9/10		K43	90858-6974	A	
90858-6025	NATURAL	1a 2a 2b 3a 4a 4b 5a 6a 6b 7a 8a 8b 9a 10a 10b	NONE	1/2 3/4 5/6 7/8 9/10		K45	90858-6973	A	
90858-6026	NATURAL	2a 2b 3a 4a 5a 9a 10a	d20 d40 07c d70 08c d100	1/2 3/4 5/6 8/9		K46	90858-6972	A	
90858-6027	NATURAL	1b 2a 3a 4b 6a 7a 8a 8b	01c d40 d60 d80	1/2 3/4 5/6 9/10		K49	90858-6971	A	
90858-6028	NATURAL	1b 5a 8b 9a 10b	03c d40 d80 09c	1/2 3/4 5/6 7/8 9/10		K50	90858-6970	A	
90858-6029	NATURAL	1b 3a 4a 4b 6b 9a 9b	01c d50 06c d70 09c	1/2 4/5 6/7 9/10		K51	90858-6969	A	
90858-6030	NATURAL	1b 4a 7a 9a	01c d20 06c d80 09c	1/2 4/5 7/8 9/10		K52	90858-6968	A	

SEE SHEET 1 EC NO: E2010-0370 DRWN: BRUTTE CHKD: JENNEHY APPR: BMAGUIRE 2010/05/13 2004/05/27 2010/06/08	QUALITY SYMBOLS ∇=0 ∇=0	GENERAL TOLERANCES (UNLESS SPECIFIED) m/m INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.1 ± --- 1 PLACE ± 0.2 ± --- ANGULAR ± 2 °	DIMENSION STYLE MM ONLY	SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	DRAWN BY NMCNAMAR	DATE 2004/05/26	CHECKED BY JDENNEHY	DATE 2004/05/27	TITLE RAST 5 VERT HDR		
	APPROVED BY BMAGUIRE	DATE 2004/05/28	MOLEX INCORPORATED			DOCUMENT NO. SD-90858-001	SHEET NO. 6 OF 7
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE CHART THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

