

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0917800001](#)
Status: **Active**
Overview: [rast_25_connector_system](#)
Description: 2.50mm (.098") Appli-Mate RAST 2.5 IDT Housing, Direct/Indirect, Female, 3 Circuits, Position Keys A & B, Polaring Key Between 1 & 2

Documents:
[3D Model](#) [Product Specification PS-99020-0040 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA LR19980
UL E29179

General

Product Family IDT and Solder Connectors
Series [91780](#)
Crimp Quality Equipment Yes
Overview [rast_25_connector_system](#)
Product Name RAST 2.5
Use With RAST standard interface

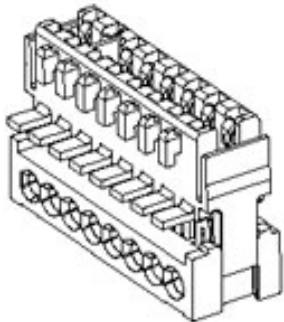
Physical

Circuits (Loaded) 3
Circuits (maximum) 3
Color - Resin Natural (White)
Durability (mating cycles max) 10
Flammability 94V-0
Gender Female
Glow-Wire Compliant No
Lock to Mating Part Yes
Material - Metal Phosphor Bronze
Material - Plating Mating Tin
Material - Plating Termination Tin
Material - Resin Nylon
Number of Rows 1
Packaging Type Tray
Panel Mount No
Pitch - Mating Interface (in) 0.098 In
Pitch - Mating Interface (mm) 2.50 mm
Pitch - Term. Interface (in) 0.098 In
Pitch - Term. Interface (mm) 2.50 mm
Plating min: Mating (µin) 40
Plating min: Mating (µm) 1.00
Plating min: Termination (µin) 40
Plating min: Termination (µm) 1.00
Polarized to Mating Part Yes
Stackable No
Temperature Range - Operating -20C TO +120C
Termination Interface: Style IDT or Pierce
Wire Size AWG 22, 24

Electrical

Current - Maximum per Contact 2A, 4A
Voltage - Maximum 32V AC

Material Info



Series

image - Reference only

EU RoHS
ELV and RoHS
Compliant
REACH SVHC
Not Reviewed
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
[91780Series](#)

Mates With
[90860](#) Applimate® Vertical Header. [90861](#) Applimate® Right Angle Header

Application Tooling | FAQ
Tooling specifications and manuals are found by selecting the products below. Crimp Height Specifications are then contained in the Application Tooling Specification document.
Global

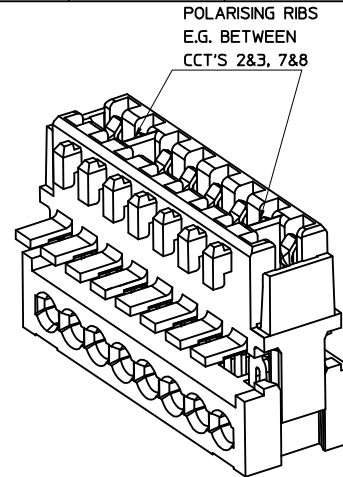
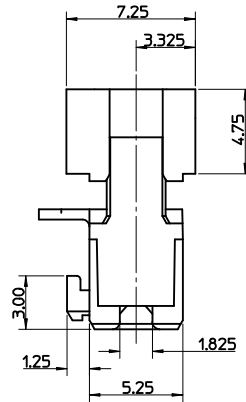
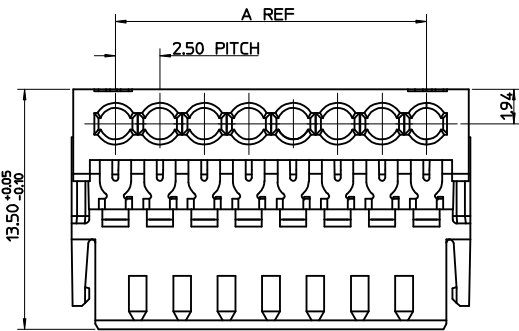
Description	Product #
RAST 2.5 Semi-Automatic Terminator Machine For Appli-Mate™ Connectors	0623006200

Reference - Drawing Numbers

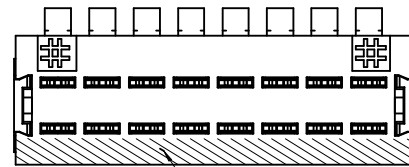
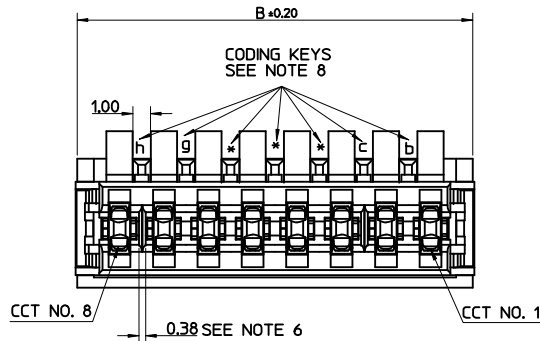
Application Specification	AS-99033-0008
Packaging Specification	PK-90871-001
Product Specification	PS-99020-0040
Sales Drawing	SD-91780-001

This document was generated on 05/28/2010

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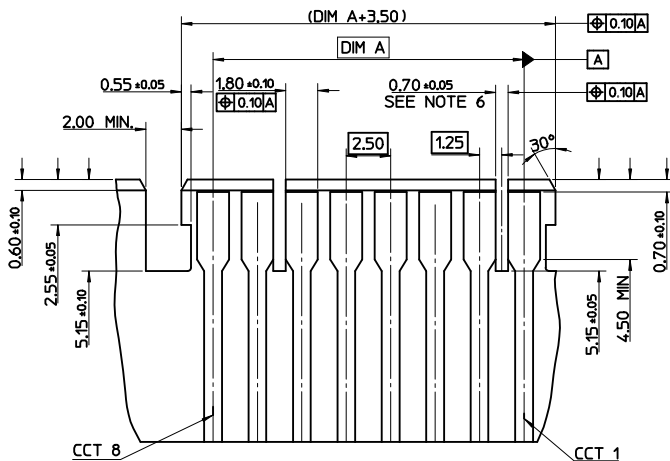


CCT	DIM A	DIM B
3	5.0	9.875
4	7.5	12.375
5	10.0	14.875
6	12.5	17.375
7	15.0	19.875
8	17.5	22.375
9	20.0	24.875
10	22.5	27.375
11	25.0	29.875
12	27.5	32.375
13	30.0	34.875
14	32.5	37.375
15	35.0	39.875
16	37.5	42.375
17	40.0	44.875
18	42.5	47.375
19	45.0	49.875
20	47.5	52.375

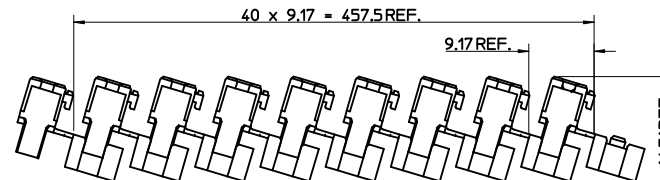


NOTES:

1. MATERIAL: HOUSING - NYLON PA66 UL94-V0 COLOUR: NATURAL
TERMINAL - COPPER ALLOY
2. PLATING: TIN
3. PRODUCT CONFORMS TO PRODUCT SPECIFICATION PS-99020-0040
4. APPLICATION SPECIFICATION AS-99033-0008
5. SEE SUBSEQUENT SHEETS FOR PART NUMBERS
6. POLARISING RIBS ARE RECOMMENDED WITH THIS PRODUCT.
SEE CONFIGURATIONS ON FOLLOWING SHEETS FOR OPTIONAL
POLARISING RIB POSITION(S) FOR EACH CCT SIZE.
RECOMMENDED: 3CCT TO 6 CCT HAVE ONE POLARISING RIB
7CCT TO 20 CCT HAS TWO POLARISING RIBS
7. COLOR STRIPE IS OPTIONAL. AVAILABLE IN THE FOLLOWING
COLORS: BLACK, RED, BLUE, GREEN
8. NO CODING KEY 'a', AS LATCH REPLACES FIRST AND LAST
CODING KEY.
9. REFER TO PACKAGING SPECIFICATION: PK-90871-001



EXAMPLE OF PCB LAYOUT FOR CONNECTOR SHOWN ABOVE
 - 8CCT WITH POLARISING RIB BETWEEN CCT 1&2 AND 6&7
 - RECOMMENDED PCB THICKNESS: 1.50±0.14mm



SHIPPING ARRANGEMENT
SCALE 2:1

ADDED PART NUMBER		DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
				mm	INCH	MM ONLY		5:1	METRIC		
EC NO: E2010-0115 DRAWN:MCNAMAR 2009/10/15 CHKD:BRITTLE 2009/10/15 APPR:BMAGUIRE 2009/10/15	REV	DESCRIPTION	QUALITY SYMBOLS	4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE		
				3 PLACES	± 0.10	± ---	N. MCNAMAR	2004/09/07			
				2 PLACES	± 0.10	± ---	CHECKED BY	DATE	2.5MM APPLI-MATE W/SIDE LATCHES (2.5 & 5MM TERM PITCH)		
				1 PLACE	± 0.2	± ---	JDENNEHY	2004/09/08			
				ANGULAR ± 2 °		APPROVED BY	DATE	MOLEX MOLEX INCORPORATED			
		BMAGUIRE	2004/09/09	DOCUMENT NO.							
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					MATERIAL NO.		SD-91780-001		SHEET NO. 1 OF 3
				SEE SHEET 2-5							
				SIZE A2		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

2 CIRCUIT

MOLEX PART NO.	TERMINAL VOID POSITION	REMOVED POSITION KEYS	CONFIGURATION (SEE NOTE 1)	POLARIZING RIB BETWEEN	COLOUR STRIPE
91780-9001	CCT 2	a d		CCT 1&2	NONE
91780-9002	CCT 2	a d		CCT 2&3	NONE
91780-9003	CCT 2	a d		NONE	NONE
91780-9004	CCT 2	a c d		CCT 1&2	RED
91780-9005	CCT 2	a b d		CCT 1&2	GREEN
91780-9006	CCT 2	a c d		CCT 2&3	BLUE
91780-9007	CCT 2	a b d		CCT 2&3	BLACK
91780-9008	CCT 2	a c d		CCT 1&2	NONE
91780-9009	CCT 2	a c d		CCT 2&3	NONE
91780-9010	CCT 2	a b d		CCT 2&3	NONE
91780-9011	CCT 2	a b d		CCT 1&2	NONE

3 CIRCUIT

MOLEX PART NO.	TERMINAL VOID POSITION	REMOVED POSITION KEYS	CONFIGURATION (SEE NOTE 1)	POLARIZING RIB BETWEEN	COLOUR STRIPE
91780-0001	NONE	a d		CCT 1&2	NONE
91780-0002	NONE	a c d		NONE	NONE
91780-0003	NONE	a d		CCT 2&3	NONE
91780-0004	NONE	a c d		CCT 1&2	NONE
91780-0005	NONE	a b d		CCT 1&2	NONE
91780-0006	NONE	a d		CCT 2&3	BLACK
91780-0007	NONE	a d		CCT 1&2	RED

4 CIRCUIT

MOLEX PART NO.	TERMINAL VOID POSITION	REMOVED POSITION KEYS	CONFIGURATION (SEE NOTE 1)	POLARIZING RIB BETWEEN	COLOUR STRIPE
91780-0501	NONE	a e		CCT 1&2	NONE
91780-0502	NONE	a e		NONE	NONE
91780-0503	CCT 3	a b e		NONE	RED
91780-0504	NONE	a d e		NONE	BLACK
91780-0505	NONE	a d e		NONE	NONE
91780-0506	CCT 3	a b e		NONE	NONE
91780-0507	NONE	a e		CCT 1&2	BLACK
91780-0508	NONE	a e		NONE	RED
91780-0509	NONE	a c e		CCT 1&2	NONE
91780-0510	NONE	a e		CCT 3&4	NONE

5 CIRCUIT

MOLEX PART NO.	TERMINAL VOID POSITION	REMOVED POSITION KEYS	CONFIGURATION (SEE NOTE 1)	POLARIZING RIB BETWEEN	COLOUR STRIPE
91780-1001	NONE	a f		CCT 2&3	NONE
91780-1002	NONE	a f		CCT 1&2	NONE
91780-1003	NONE	a f		CCT 2&3	BLACK
91780-1004	CCT 4	a f		CCT 1&2	GREEN
91780-1005	NONE	a f		CCT 3&4	RED
91780-1006	CCT 2	a f		CCT 3&4	BLUE

6 CIRCUIT

MOLEX PART NO.	TERMINAL VOID POSITION	REMOVED POSITION KEYS	CONFIGURATION (SEE NOTE 1)	POLARIZING RIB BETWEEN	COLOUR STRIPE
91780-1501	NONE	a g		CCT 2&3	NONE
91780-1502	NONE	a g		CCT 5&6	NONE
91780-1503	NONE	a g		CCT 2&3	BLACK
91780-1504	NONE	a g		CCT 2&3	BLUE
91780-1505	NONE	a g		CCT 1&2	NONE

7 CIRCUIT

MOLEX PART NO.	TERMINAL VOID POSITION	REMOVED POSITION KEYS	CONFIGURATION (SEE NOTE 1)	POLARIZING RIB BETWEEN	COLOUR STRIPE
91780-2001	NONE	a h		CCT 1&2 & CCT 5&6	NONE
91780-2002	CCT 2	a h		CCT 1&2	NONE
91780-2003	NONE	a h		CCT 2&3	BLACK

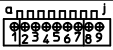
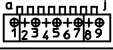
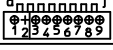
8 CIRCUIT

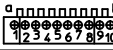
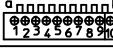
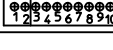
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91780-2501	NONE	a i		CCT 1&2 & CCT 6&7	NONE
91780-2502	CKT 2, 5	a i		CCT 1&2 & CCT 6&7	NONE
91780-2503	CKT 2	a i		CCT 1&2 & CCT 6&7	NONE
91780-2504	NONE	a i		CCT 2&3	NONE
91780-2505	CKT 2, 5	a i		CCT 2&3	NONE
91780-2506	NONE	a i		CCT 1&2	NONE
91780-2507	NONE	a i		CCT 3&4	NONE
91780-2508	NONE	a i		CCT 3&4	RED

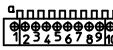
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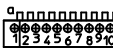
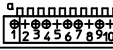
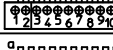
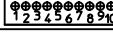
1. + DENOTES TERMINAL VOIDED POSITION
 ● DENOTES TERMINAL LOADED POSITION
 | DENOTES POLARIZING RIB POSITION

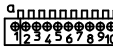
SEE SHEET 1 SEC NO: E2010-015 DRN: NCMAMA CHKD: BRUTLE APPR: BMAGUIRE DATE: 2009/10/15 DATE: 2009/10/15 DATE: 2009/10/15	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ±.--- ±.--- 3 PLACES ±0.10 ±.--- 2 PLACES ±0.10 ±.--- 1 PLACE ±0.2 ±.--- ANGULAR ± 2°	DIMENSION STYLE MM ONLY DRAWN BY N.MCNAME DATE 2004/09/07 CHECKED BY J.DENNEY DATE 2004/09/08 APPROVED BY BMAGUIRE DATE 2004/09/09	SCALE 1:1 DESIGN UNITS METRIC THIRD ANGLE PROJECTION	TITLE 2.5MM APPLI-MATE W/SIDE LATCHES (2.5 & 5MM TERM PITCH)	MOLEX INCORPORATED DOCUMENT NO. SD-91780-001 SHEET NO. 2 OF 3
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					
	SEE CHARTS THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
	MATERIAL NO.					

9 CIRCUIT					
MOLEX PART NO.	TERMINAL VOID POSITION	REMOVED POSITION KEYS	CONFIGURATION (SEE NOTE 1)	POLARIZING RIB BETWEEN	COLOUR STRIPE
91780-3001	NONE	a j		CCT 1&2 & CCT 7&8	NONE
91780-3426	CCT 2, 4, 6, 8	a j		CCT 1&2 & CCT 7&8	NONE
91780-3003	CCT 2	a j		CCT 2&3	GREEN

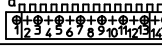
10 CIRCUIT					
MOLEX PART NO.	TERMINAL VOID POSITION	REMOVED POSITION KEYS	CONFIGURATION (SEE NOTE 1)	POLARIZING RIB BETWEEN	COLOUR STRIPE
91780-3501	NONE	a k		CCT 1&2 & CCT 8&9	NONE
91780-3502	NONE	a k		CCT 9&10	RED
91780-3503	NONE	a k		CCT 9&10	NONE
91780-3504	NONE	a k		CCT 2&3	NONE
91780-3505	NONE	a k		CCT 2&3	BLACK

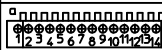
11 CIRCUIT					
MOLEX PART NO.	TERMINAL VOID POSITION	REMOVED POSITION KEYS	CONFIGURATION (SEE NOTE 1)	POLARIZING RIB BETWEEN	COLOUR STRIPE
91780-4001	NONE	a l		CCT 1&2 & CCT 9&10	NONE

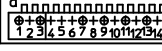
12 CIRCUIT					
MOLEX PART NO.	TERMINAL VOID POSITION	REMOVED POSITION KEYS	CONFIGURATION (SEE NOTE 1)	POLARIZING RIB BETWEEN	COLOUR STRIPE
91780-4501	NONE	a m		CCT 1&2 & CCT 10&11	NONE
91780-4502	CCT 2, 5, 8, 10	a m		CCT 1&2 & CCT 10&11	NONE
91780-4503	NONE	a m		CCT 2&3	NONE
91780-4504	CCT 2, 5, 8, 10	a m		CCT 2&3	NONE
91780-4505	NONE	a m		CCT 2&3	BLACK
91780-4506	NONE	a m		CCT 11&12	NONE

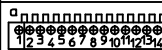
13 CIRCUIT					
MOLEX PART NO.	TERMINAL VOID POSITION	REMOVED POSITION KEYS	CONFIGURATION (SEE NOTE 1)	POLARIZING RIB BETWEEN	COLOUR STRIPE
91780-5001	NONE	a n		CCT 1&2 & CCT 11&12	NONE

14 CIRCUIT					
MOLEX PART NO.	TERMINAL VOID POSITION	REMOVED POSITION KEYS	CONFIGURATION (SEE NOTE 1)	POLARIZING RIB BETWEEN	COLOUR STRIPE
91780-5501	NONE	a o		CCT 1&2 & CCT 12&13	NONE

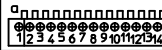
15 CIRCUIT					
MOLEX PART NO.	TERMINAL VOID POSITION	REMOVED POSITION KEYS	CONFIGURATION (SEE NOTE 1)	POLARIZING RIB BETWEEN	COLOUR STRIPE
91780-6001	NONE	a p		CCT 1&2 & CCT 13&14	NONE
91780-6426	CCT 2, 4, 6, 8, 10, 12, 14	a p		CCT 1&2 & CCT 13&14	NONE

16 CIRCUIT					
MOLEX PART NO.	TERMINAL VOID POSITION	REMOVED POSITION KEYS	CONFIGURATION (SEE NOTE 1)	POLARIZING RIB BETWEEN	COLOUR STRIPE
91780-6501	NONE	a q		CCT 1&2 & CCT 14&15	NONE

17 CIRCUIT					
MOLEX PART NO.	TERMINAL VOID POSITION	REMOVED POSITION KEYS	CONFIGURATION (SEE NOTE 1)	POLARIZING RIB BETWEEN	COLOUR STRIPE
91780-7001	NONE	a r		CCT 1&2 & CCT 15&16	NONE
91780-7002	CCT 2, 4, 5, 6, 8, 10, 12, 14, 16,	a r		CCT 3&4 & CCT 15&16	NONE

18 CIRCUIT					
MOLEX PART NO.	TERMINAL VOID POSITION	REMOVED POSITION KEYS	CONFIGURATION (SEE NOTE 1)	POLARIZING RIB BETWEEN	COLOUR STRIPE
91780-7501	NONE	a s		CCT 1&2 & CCT 16&17	NONE

19 CIRCUIT					
MOLEX PART NO.	TERMINAL VOID POSITION	REMOVED POSITION KEYS	CONFIGURATION (SEE NOTE 1)	POLARIZING RIB BETWEEN	COLOUR STRIPE
91780-8001	NONE	a t		CCT 1&2 & CCT 17&18	NONE

20 CIRCUIT					
MOLEX PART NO.	TERMINAL VOID POSITION	REMOVED POSITION KEYS	CONFIGURATION (SEE NOTE 1)	POLARIZING RIB BETWEEN	COLOUR STRIPE
91780-8501	NONE	a u		CCT 1&2 & CCT 18&19	NONE

- NOTES
1. + DENOTES TERMINAL VOIDED POSITION
⊕ DENOTES TERMINAL LOADED POSITION
| DENOTES POLARIZING RIB POSITION

SEE SHEET 1 EC NO: E2010-015 DRAWN BY: N.MCNAME CHKD BY: CHODRUTTE APPROVED BY: BMAGUIRE	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		mm INCH		DRAWN BY DATE N.MCNAME 2004/09/07		TITLE 2.5MM APPLI-MATE W/SIDE LATCHES (2.5 & 5MM TERM PITCH)			
		4 PLACES ± --- ± --- 3 PLACES ± 0.10 ± --- 2 PLACES ± 0.10 ± --- 1 PLACE ± 0.2 ± --- ANGULAR ± 2°		CHECKED BY DATE J.DENNEY 2004/09/08		APPROVED BY DATE BMAGUIRE 2004/09/09			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE CHARTS		DOCUMENT NO. SD-91780-001			
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						SHEET NO. 3 OF 3			