

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0917803502](#)  
**Status:** **Active**  
**Overview:** [rast\\_25\\_connector\\_system](#)  
**Description:** 2.50mm (.098") Appli-Mate RAST 2.5 IDT Housing, Direct/Indirect, Female, 10 Circuits, Position Keys A & K, Polaring Key Between 9 & 10

**Documents:**

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

**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) 10  
 Circuits (maximum) 10  
 Color - Resin Natural (White)  
 Durability (mating cycles max) 10  
 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**

**Reference - Drawing Numbers**

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

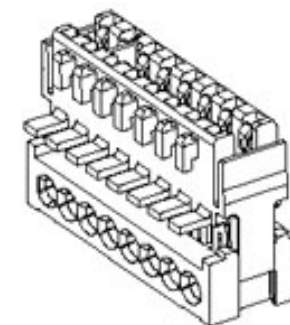


image - Reference only

Series

**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC**  
 Not Reviewed  
**Halogen-Free Status**

**China RoHS**



**Not Reviewed**

**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto: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**

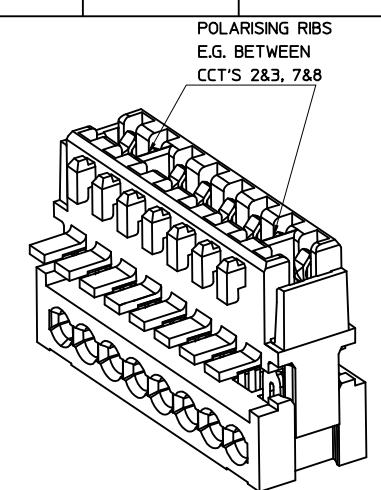
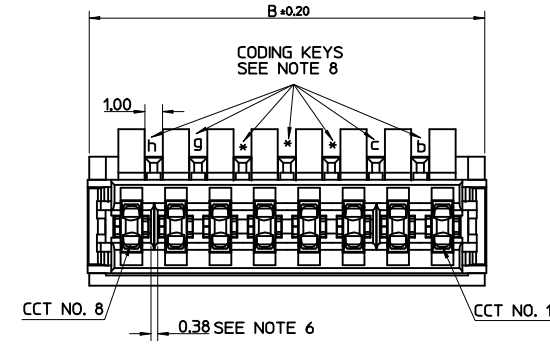
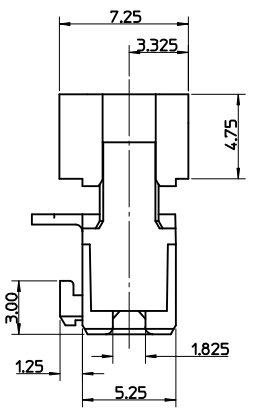
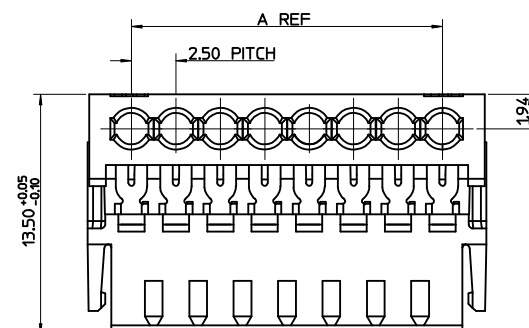
*Tooling specifications and manuals are found by selecting the products below. Crimp Height Specifications are then contained in the Application Tooling Specification document.*

**Global**

Description	Product #
RAST 2.5 Semi-Automatic Terminator Machine For Appli-Mate™ Connectors	<a href="#">0623006200</a>

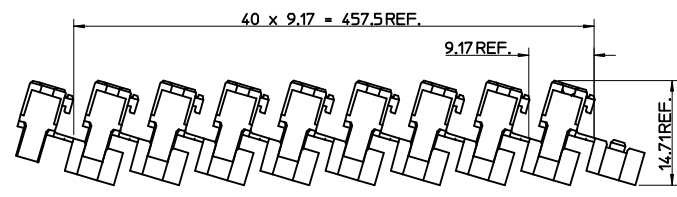
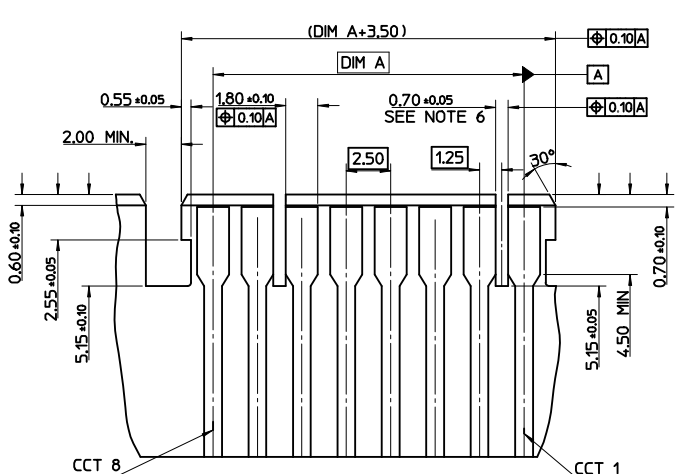
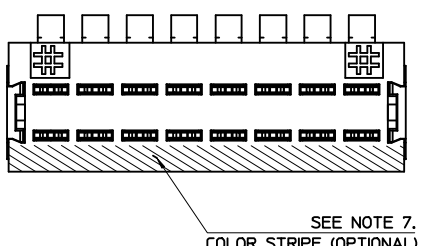
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CCT	DIM A	DIM B
3	5.0	9.875
4	7.5	12.375
5	10.0	14.875
6	12.5	17.375
7	15.0	19.875
8	17.5	22.375
9	20.0	24.875
10	22.5	27.375
11	25.0	29.875
12	27.5	32.375
13	30.0	34.875
14	32.5	37.375
15	35.0	39.875
16	37.5	42.375
17	40.0	44.875
18	42.5	47.375
19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

- NOTES:
- MATERIAL: HOUSING - NYLON PA66 UL94-V0 COLOUR: NATURAL  
TERMINAL - COPPER ALLOY
  - PLATING: TIN
  - PRODUCT CONFORMS TO PRODUCT SPECIFICATION PS-99020-0040
  - APPLICATION SPECIFICATION AS-99033-0008
  - SEE SUBSEQUENT SHEETS FOR PART NUMBERS
  - 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
  - COLOR STRIPE IS OPTIONAL. AVAILABLE IN THE FOLLOWING COLORS: BLACK, RED, BLUE, GREEN
  - NO CODING KEY 'a', AS LATCH REPLACES FIRST AND LAST CODING KEY.
  - REFER TO PACKAGING SPECIFICATION: PK-90871-001



SHIPPING ARRANGEMENT  
SCALE 2:1

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

ADDED PART NUMBER EC NO: E2010-0115 DRAWN: MCMAMAR 2009/10/15 CHKD: BRUTTLE 2009/10/15 APPR: BMAGUIRE 2009/10/15	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
			m	INCH	DRAWN BY N. MCNAMA	DATE 2004/09/07	TITLE 2.5MM APPLI-MATE W/SIDE LATCHES (2.5 & 5MM TERM PITCH)		
M	REV		4 PLACES ±---	±---	CHECKED BY J DENNEHY	DATE 2004/09/08	MOLEX INCORPORATED		SHEET NO. 1 OF 3
			3 PLACES ±0.10	±---	APPROVED BY BMAGUIRE	DATE 2004/09/09	DOCUMENT NO. SD-91780-001		
			2 PLACES ±0.10	±---	SEE SHEET 2-5				
			1 PLACE ±0.2	±---	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
			ANGULAR ± 2°						
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS						

## 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

MOLEX PART NO.	TERMINAL VOID POSITION	REMOVED POSITION KEYS	CONFIGURATION (SEE NOTE 1)	POLARIZING RIB BETWEEN	COLOUR STRIPE
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

### NOTES

- + DENOTES TERMINAL VOIDED POSITION
- ⊙ DENOTES TERMINAL LOADED POSITION
- | DENOTES POLARIZING RIB POSITION

SEE SHEET 1 SEC NO: E2010-015 DR: N.MCNAMEAR CHK: D.BRITTLE APPR: B.MAGUIRE	QUALITY SYMBOLS ∇=0 ∇=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm    INCH 4 PLACES ± 0.10 ± 0.004 3 PLACES ± 0.10 ± 0.004 2 PLACES ± 0.10 ± 0.004 1 PLACE ± 0.2 ± 0.008 ANGULAR ± 2°	DIMENSION STYLE MM ONLY	SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	DRAWN BY N.MCNAMEAR DATE 2004/09/07	CHECKED BY J.DENNEHY DATE 2004/09/08	APPROVED BY B.MAGUIRE DATE 2004/09/09	MATERIAL NO.	DOCUMENT NO.	TITLE 2.5MM APPLI-MATE W/SIDE LATCHES (2.5 & 5MM TERM PITCH)	MOLEX INCORPORATED
	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	SD-91780-001	SHEET NO. 2 OF 3	MOLEX INCORPORATED	MOLEX INCORPORATED
	M	REV	DESCRIPTION	DATE	DATE	DATE	DATE

### 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

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

### 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

<b>SEE SHEET 1</b> EC NO: E2010-015 DRAWN BY: MCMAR CHKD BY: BRUTTE APPR: BMAGUIRE 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. MCNAMA DATE: 2004/09/07 CHECKED BY: J. DENNEHY 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
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			MATERIAL NO. SD-91780-001 SHEET NO. 3 OF 3
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