

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

**Part Number:** [0643212011](#)  
**Status:** **Active**  
**Overview:** [cmc\\_connectors](#)  
**Description:** .635mm (.025"), 1.50mm (.059"), 2.80mm (.110"), CMC Receptacle, 53 Circuits, Right Wire Output, Black Coding, Mat Sealed

**Documents:**

[3D Model](#)  
[Drawing \(PDF\)](#)  
[Application Specification \(PDF\)](#)  
[Product Specification PS-64321-001 \(PDF\)](#)  
[RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family Crimp Housings  
Series [64321](#)  
Comments \* Current tested on a fully loaded connector, current for temperature increase of 40°C. Current max = 21.0A for 2.8mm Terminal (5.0mm² wire), 12.0A for 1.5mm Terminal (2.0mm² wire), 2.5A for 0.635mm Terminal (0.75mm² wire) \*  
More Detailed Tech Information Sealed, high-density, power, modular connecting system for Power Train and Body Electronics applications in cars, trucks, busses  
Overview [cmc\\_connectors](#)  
Product Name CMC

**Physical**

Circuits (maximum) 53  
Circuits Detail 5x 2.8mm, 8 x 1.5mm, 40 x 0.635mm terminals  
Color - Resin Black  
Gender Female  
Glow-Wire Compliant No  
Keying to Mating Part Yes  
Lock to Mating Part Yes  
Material - Resin Polyester  
Number of Rows 5  
Packaging Type Carton  
Panel Mount No  
Pitch - Mating Interface (in) 0.100 In, 0.138 In, 0.276 In  
Pitch - Mating Interface (mm) 2.54 mm, 3.50 mm, 7.00 mm  
Polarized to Mating Part Yes  
Stackable No  
Temperature Range - Operating -40°C to +125°C

**Electrical**

Current - Maximum per Contact 12A, 2.5A, 21A

**Material Info**

**Reference - Drawing Numbers**

[Application Specification](#) AS-64321-001  
[Product Specification](#) PS-64321-001  
[Sales Drawing](#) SD-64321-001

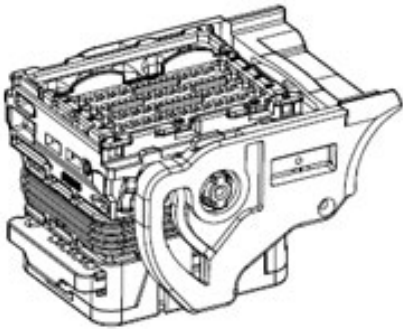


image - Reference only

Series

**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](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**

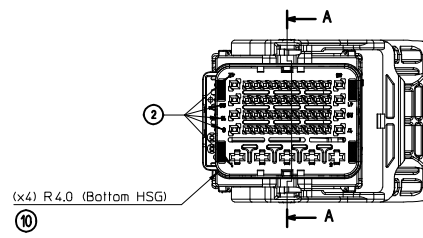
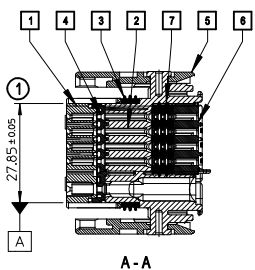
[64321Series](#)

**Mates With**

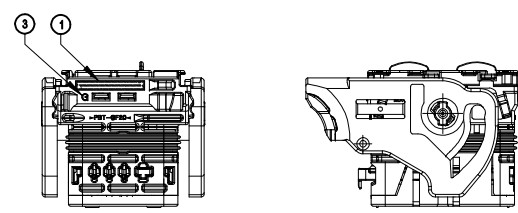
53 Circuit CMC Header 98997-1002 -  
Please Contact Molex for details

**Use With**

Female Terminals [64322](#) CP 0.635 (.025"), [64323](#) CP 1.5 (.059"). Circuit Way Plugs [643251010](#) , [643251023](#) , [643251091](#). CMC Wire Cap [643211101](#). Header [989971002](#) (contact Molex on Header)

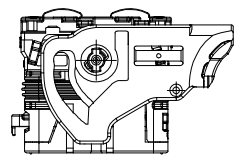
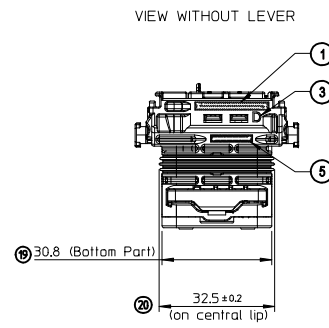
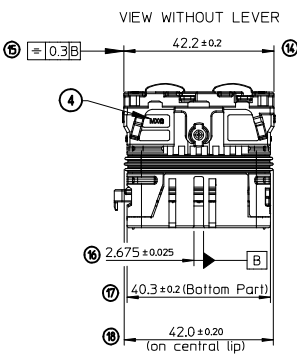
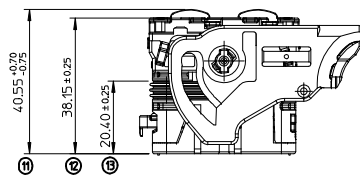
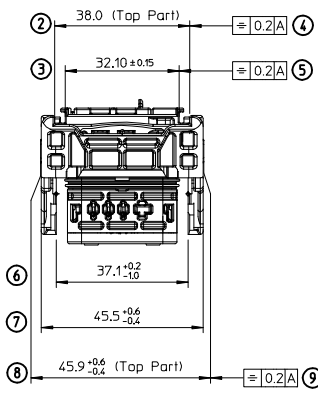
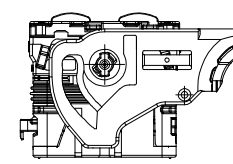
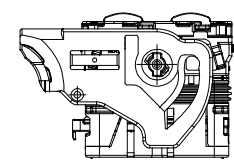


CMC 53W EQUIPED LEVER ON THE LEFT ("G" POSITION)

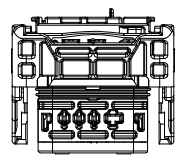


| LEVER IN "G" POSITION (LEFT)<br>(Position shown below) |       |
|--------------------------------------------------------|-------|
| MOLEX P/N                                              | COLOR |
| 0643211011                                             | BLACK |
| 0643211018                                             | GREY  |
| 0643211019                                             | BROWN |

| LEVER IN "D" POSITION (RIGHT)<br>(Position shown below) |       |
|---------------------------------------------------------|-------|
| MOLEX P/N                                               | COLOR |
| 0643212011                                              | BLACK |
| 0643212018                                              | GREY  |
| 0643212019                                              | BROWN |

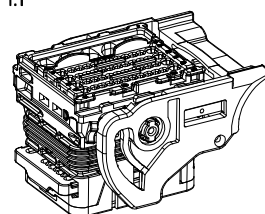
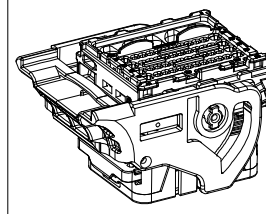


1:1



ISOMETRIC VIEWS

1:1



LEVER IN "G" POSITION (LEFT)

LEVER "D" POSITION (RIGHT)

MARKINGS:

- 1 - Tracking N° for assembled connector. (Year & Day)
- 2 - Cavities Identification (N°).
- 3 - Lever sens indicator. Visible letter "D" = Housing with lever on the RIGHT. (Lever on the opposite side of the SL Key) Visible letter "G" = Housing with lever on the LEFT. (Lever on the side of the SL Key)
- 4 - Supplier logo.
- 5 - Molex Area.

NOTES:

- 1- The represented female connector is the "D" version (Way out on the Right), Black coding.
- 2- Application Spec.: AS-64321-001
- 3- Plugs & caps used:
  - Cavities 0.6: plug: 0643251010
  - Cavities 1.5: plug: 0643251023
  - Cavities 2.8: cap: 0643251091
- 4- Weight: 50.8 g
- 5- The assembled female connector matches with the cover CMC 53W (P/N: 0643211101)

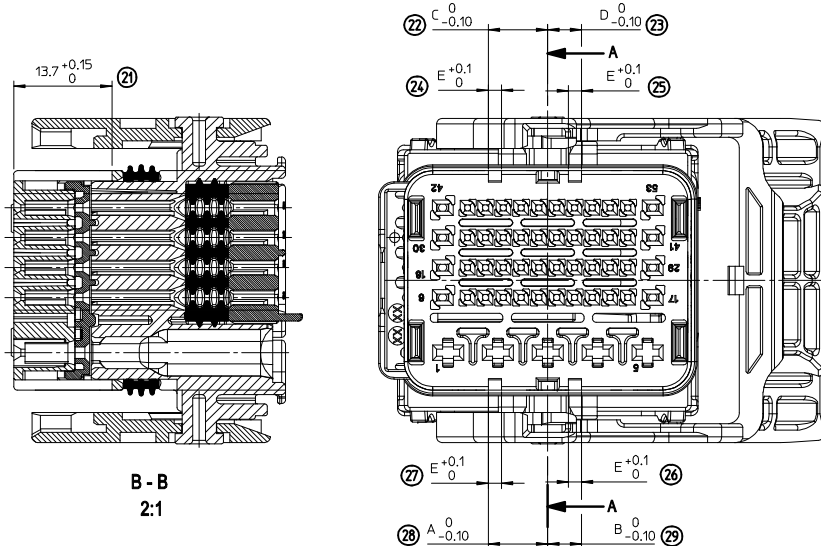
\* - Clamping areas on male connector.

| POS. | QTY | DESCRIPTION           | MATERIAL   | COLOR                  |
|------|-----|-----------------------|------------|------------------------|
| 7    | 1   | BACK SEAL "GROMMET"   | Silicon    | ORANGE                 |
| 6    | 1   | REAR SEAL COVER       | >PBT-GF20< | GREY                   |
| 5    | 1   | LOCKING LEVER R&L S4  | >PBT-GF30< | BLACK                  |
| 4    | 1   | TPA                   | >PBT-GF20< | YELLOW                 |
| 3    | 1   | PERIMETER SEAL SIZE 4 | Silicon    | ORANGE                 |
| 2    | 1   | HOUSING TOP PART      | >PBT-GF20< | BROWN                  |
| 1    | 1   | HOUSING BOTTOM PART   | >PBT-GF20< | BLACK<br>BROWN<br>GREY |

|                                                                                                                                       |             |                                                            |        |                            |                            |                              |                                                                                                          |                                                                                                                                  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------|-------------|------------------------------------------------------------|--------|----------------------------|----------------------------|------------------------------|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--|--|
| ACCORDING FPIR<br>EC NO: G2009-0092<br>DRAWN: G. DESBRUERES 2008/10/23<br>CHKD: O. PLESSIS 2008/11/05<br>APPR: C. BOULCHAN 2008/11/05 | DESCRIPTION | GENERAL TOLERANCES<br>(UNLESS SPECIFIED)                   |        | DIMENSION STYLE<br>MM ONLY |                            | SCALE<br>1:1                 | DESIGN UNITS<br>METRIC                                                                                   |  FIRST ANGLE<br>PROJECTION                  |  |  |
|                                                                                                                                       |             |                                                            | mm     | INCH                       | DRAWN BY<br>G. DESBRUERES  | DATE<br>2007/09/05           | TITLE<br>CMC FEMALE MODULE 53W<br>GENERIC SALES DRAWING                                                  |                                                                                                                                  |  |  |
|                                                                                                                                       |             | 4 PLACES                                                   | ± ---  | ± ---                      | CHECKED BY<br>O. PLESSIS   | DATE<br>2007/09/06           |                                                                                                          |                                                                                                                                  |  |  |
|                                                                                                                                       |             | 3 PLACES                                                   | ± ---  | ± ---                      | APPROVED BY<br>L. STICKEIR | DATE<br>2007/09/07           |                                                                                                          |                                                                                                                                  |  |  |
|                                                                                                                                       |             | 2 PLACES                                                   | ± 0.05 | ± ---                      | MATERIAL NO.<br>SEE CHARTS | DOCUMENT NO.<br>SD-64321-001 |                                                                                                          |                                                                                                                                  |  |  |
|                                                                                                                                       |             | 1 PLACE                                                    | ± 0.1  | ± ---                      |                            |                              |  MOLEX INCORPORATED | SHEET NO.<br>1 OF 2                                                                                                              |  |  |
|                                                                                                                                       |             | ANGULAR ± 2 °                                              |        |                            |                            |                              |                                                                                                          |                                                                                                                                  |  |  |
|                                                                                                                                       |             | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |        |                            |                            |                              |                                                                                                          |                                                                                                                                  |  |  |
|                                                                                                                                       |             | B                                                          | REV    |                            |                            | SIZE<br>A2                   |                                                                                                          | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |  |
|                                                                                                                                       |             |                                                            |        |                            |                            |                              |                                                                                                          |                                                                                                                                  |  |  |

# CODINGS

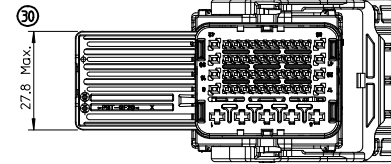
# FEMALE HOUSING WITH THE LEVER ON "D" (RIGHT) POSITION.



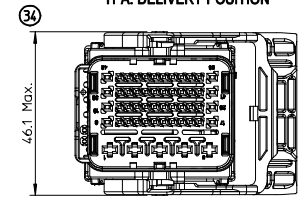
| COLOR | CODING | A <sup>0</sup> <sub>-0.1</sub> | B <sup>0</sup> <sub>-0.1</sub> | C <sup>0</sup> <sub>-0.1</sub> | D <sup>0</sup> <sub>-0.1</sub> | E <sup>+0.1</sup> <sub>0</sub> |
|-------|--------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| BLACK | 1      | 8.4                            | 4.8                            | 8.4                            | 4.8                            | 1.8                            |
| GREY  | 2      | 8.4                            | 6.6                            | 6.6                            | 6.6                            | 1.8                            |
| BROWN | 3      | 8.4                            | 8.4                            | 4.8                            | 10.2                           | 1.8                            |

# MODULE OVERALL DIMENSIONS:

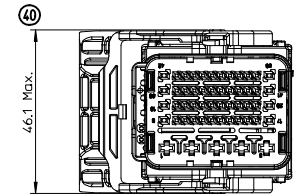
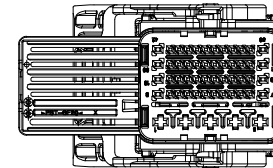
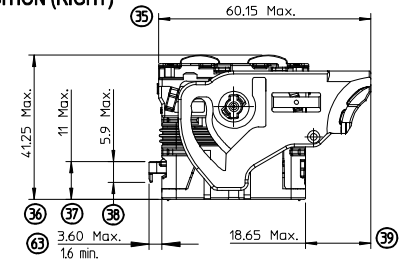
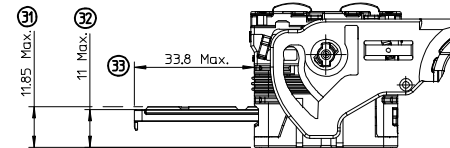
## TPA: UNLOCKED POSITION



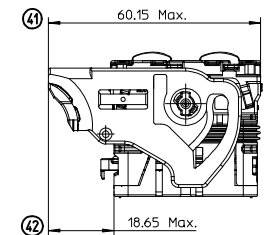
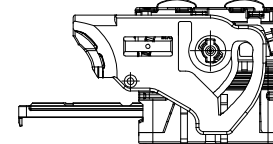
## TPA: DELIVERY POSITION



## LEVER IN "D" POSITION (RIGHT)



## LEVER IN "G" POSITION (LEFT)



## TERMINALS' P/N(S)

| CAVITIES N°                                 | FEMALE TERMINALS (Section mm2) | PLATING     | MOLEX P/N  | WIRE SEAL  | min / MAX WIRE INSULATION DIAMETER |
|---------------------------------------------|--------------------------------|-------------|------------|------------|------------------------------------|
| 7 to 16<br>19 to 28<br>31 to 40<br>43 to 52 | CP 0.6 (0.35mm2)               | Tin plated  | 0643221019 |            | Ø1.25 min. / Ø1.40 Max.            |
|                                             |                                | Gold plated | 0643221229 |            |                                    |
|                                             | CP 0.6 (0.5mm2)                | Tin plated  | 0643221039 |            | Ø1.40 min. / Ø1.70 Max.            |
|                                             |                                | Gold plated | 0643221239 |            |                                    |
|                                             | CP 0.6 (0.75mm2)               | Tin plated  | 0643221029 |            | Ø1.60 min. / Ø1.90 Max.            |
|                                             |                                | Gold plated | 0643221219 |            |                                    |
| 6, 17, 18<br>29, 30, 41<br>42, 53           | CP 1.5<br>(0.5mm2 to 1mm2)     | Tin plated  | 0643231029 |            | Ø1.45 min. / Ø2.15 Max.            |
|                                             |                                | Gold plated | 0643231319 |            |                                    |
|                                             | CP 1.5<br>(>1mm2 to 2mm2)      | Tin plated  | 0643231039 |            | Ø2.10 min. / Ø2.80 Max.            |
|                                             |                                | Gold plated | 0643231219 |            |                                    |
|                                             | CP 2.8<br>(>0.5mm2 to 1mm2)    | Tin plated  | 0643241049 | 0643251162 | Ø1.40 min. / Ø2.15 Max.            |
|                                             |                                | Gold plated | 0643241149 |            |                                    |
| 1 to 5                                      | CP 2.8<br>(>1mm2 to 2mm2)      | Tin plated  | 0643241039 | 0643251175 | Ø2.10 min. / Ø2.80 Max.            |
|                                             |                                | Gold plated | 0643241139 |            |                                    |
|                                             | CP 2.8<br>(>2mm2 to 3mm2)      | Tin plated  | 0643241029 | 0643251188 | Ø2.65 min. / Ø3.45 Max.            |
|                                             |                                | Gold plated | 0643241129 |            |                                    |
|                                             | CP 2.8<br>(>3mm2 to 5mm2)      | Tin plated  | 0643241019 | 0643251196 | Ø3.40 min. / Ø4.00 Max.            |
|                                             |                                | Gold plated | 0643241119 |            |                                    |

|                                                                                                                                      |             |                                          |                                                            |                            |                            |                     |                                                         |                                                                                                                 |                                                                                                                                  |  |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------|------------------------------------------|------------------------------------------------------------|----------------------------|----------------------------|---------------------|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--|
| ACCORDING FPIR<br>EC NO: G2009-0092<br>DRAWN: G. DESBRUERES 2008/10/23<br>CHKD: O. PLESSIS 2008/11/05<br>APPR: C. BOUCHAN 2008/11/05 | DESCRIPTION | GENERAL TOLERANCES<br>(UNLESS SPECIFIED) |                                                            | DIMENSION STYLE<br>MM ONLY |                            | SCALE<br>1.5:1      | DESIGN UNITS<br>METRIC                                  |  FIRST ANGLE<br>PROJECTION |                                                                                                                                  |  |
|                                                                                                                                      |             |                                          | mm                                                         | INCH                       | DRAWN BY<br>G. DESBRUERES  | DATE<br>2007/09/05  | TITLE<br>CMC FEMALE MODULE 53W<br>GENERIC SALES DRAWING |                                                                                                                 |                                                                                                                                  |  |
|                                                                                                                                      |             | 4 PLACES                                 | ± ---                                                      | ± ---                      | CHECKED BY<br>O. PLESSIS   | DATE<br>2007/09/06  |                                                         |                                                                                                                 |                                                                                                                                  |  |
|                                                                                                                                      |             | 3 PLACES                                 | ± ---                                                      | ± ---                      | APPROVED BY<br>L. STICKEIR |                     |                                                         | MOLEX INCORPORATED                                                                                              |                                                                                                                                  |  |
|                                                                                                                                      |             | 2 PLACES                                 | ± 0.05                                                     | ± ---                      |                            |                     |                                                         |                                                                                                                 |                                                                                                                                  |  |
| 1 PLACE                                                                                                                              | ± 0.1       | ± ---                                    | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |                            |                            | SHEET NO.<br>2 OF 2 |                                                         |                                                                                                                 |                                                                                                                                  |  |
| ANGULAR ± 2 °                                                                                                                        |             |                                          |                                                            |                            |                            |                     |                                                         |                                                                                                                 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |
|                                                                                                                                      |             |                                          |                                                            |                            |                            |                     |                                                         |                                                                                                                 |                                                                                                                                  |  |