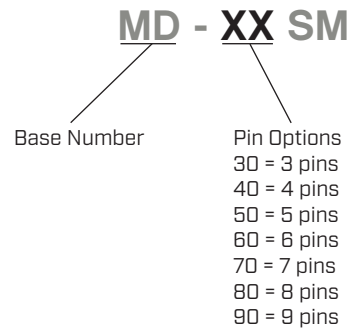


**SERIES:** MD-SM | **DESCRIPTION:** MINI DIN CONNECTOR**FEATURES**

- PCB mount
- right angle
- side shielded

**PART NUMBER KEY****SPECIFICATIONS**

| parameter             | conditions/description  | min | typ       | max    | units      |
|-----------------------|-------------------------|-----|-----------|--------|------------|
| rated input voltage   |                         |     | 100<br>12 |        | Vac<br>Vdc |
| rated input current   | at 100 Vac<br>at 12 Vdc |     |           | 1<br>2 | A<br>A     |
| contact resistance    |                         |     |           | 30     | mΩ         |
| insulation resistance | at 250 Vdc              | 50  |           |        | MΩ         |
| voltage withstand     | for 1 minute            |     |           | 250    | Vac        |
| insertion force       |                         | 0.8 |           | 6.0    | kg         |
| withdrawal force      |                         | 0.8 |           | 4.5    | kg         |
| operating temperature |                         | -40 |           | 85     | °C         |
| life                  |                         |     | 1000      |        | cycles     |
| flammability rating   | UL94V-0                 |     |           |        |            |
| RoHS                  | yes                     |     |           |        |            |

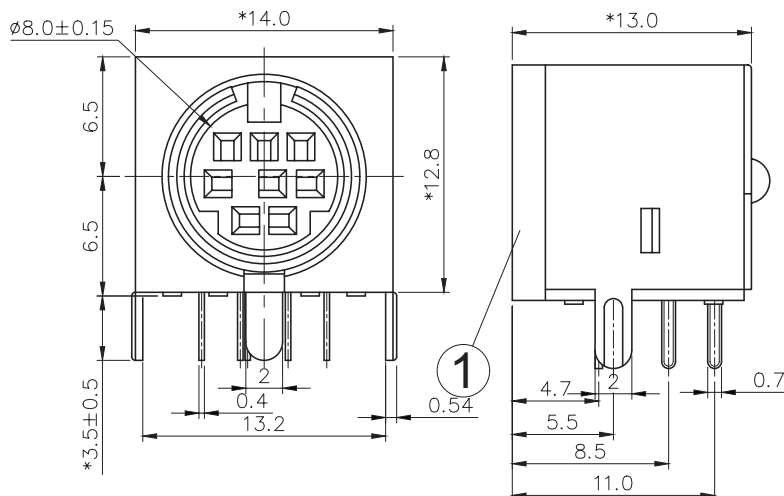
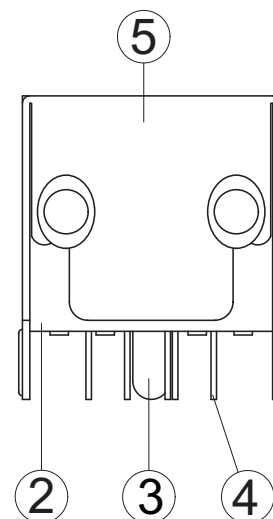
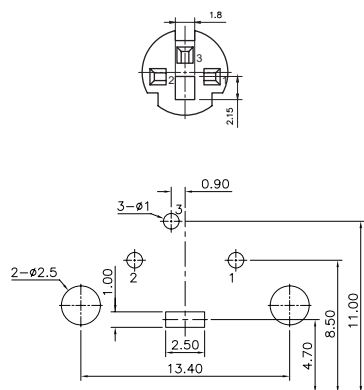
**SOLDERABILITY**

| parameter      | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| wave soldering | for 10 seconds max     | 235 |     | 260 | °C    |
| hand soldering | for 5±1 seconds        | 240 | 245 | 250 | °C    |

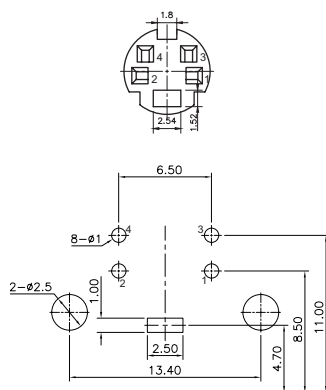
## MECHANICAL DRAWINGS (MD-30SM, MD-40SM, MD-50SM)

units: mm  
 tolerance:  $\pm 0.3$  mm  
 PCB:  $\pm 0.1$  mm  
 unless otherwise noted

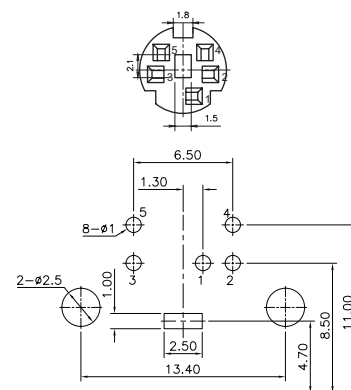
| ITEM | DESCRIPTION    | MATERIAL        | PLATING/COLOR |
|------|----------------|-----------------|---------------|
| 1    | body           | PBT [UL94V-0]   | black         |
| 2    | cover          | PBT [UL94V-0]   | black         |
| 3    | earth terminal | brass           | tin           |
| 4    | terminals      | phosphor bronze | silver        |
| 5    | shield         | SPCC            | tin           |

**MD-30SM****MD-40SM****MD-50SM**

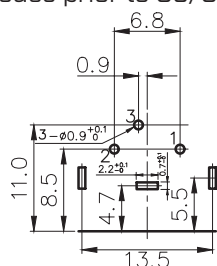
Recommended PCB Layout  
 Top View  
 [Date Codes prior to 03/03/2022]



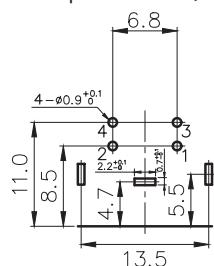
Recommended PCB Layout  
 Top View  
 [Date Codes prior to 03/03/2022]



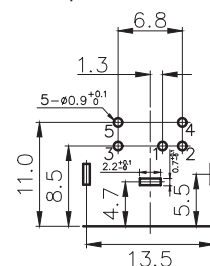
Recommended PCB Layout  
 Top View  
 [Date Codes prior to 03/03/2022]



Recommended PCB Layout  
 Top View  
 [Date Codes after 03/03/2022]



Recommended PCB Layout  
 Top View  
 [Date Codes after 03/03/2022]



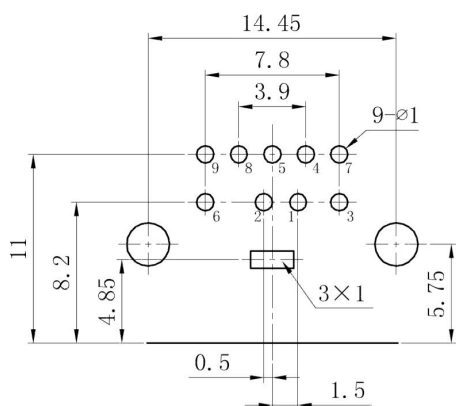
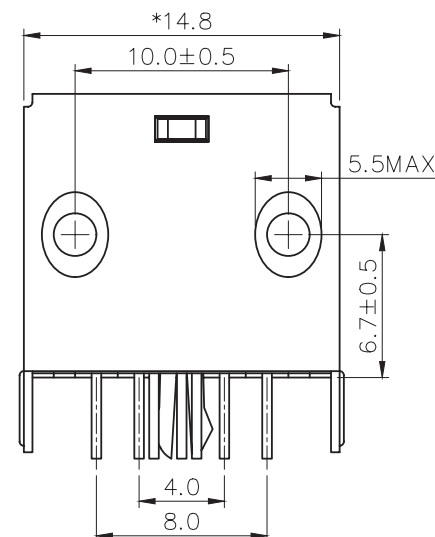
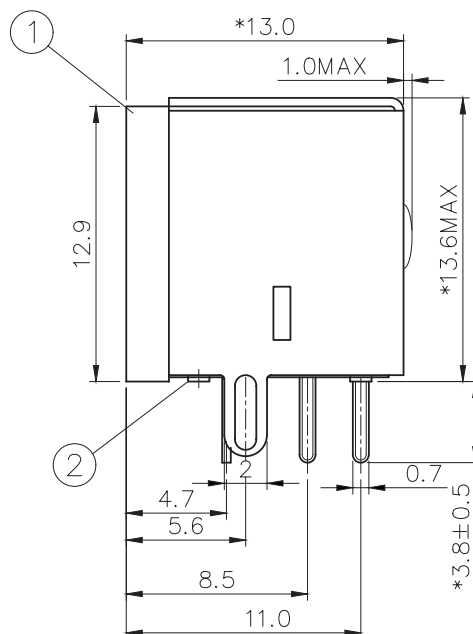
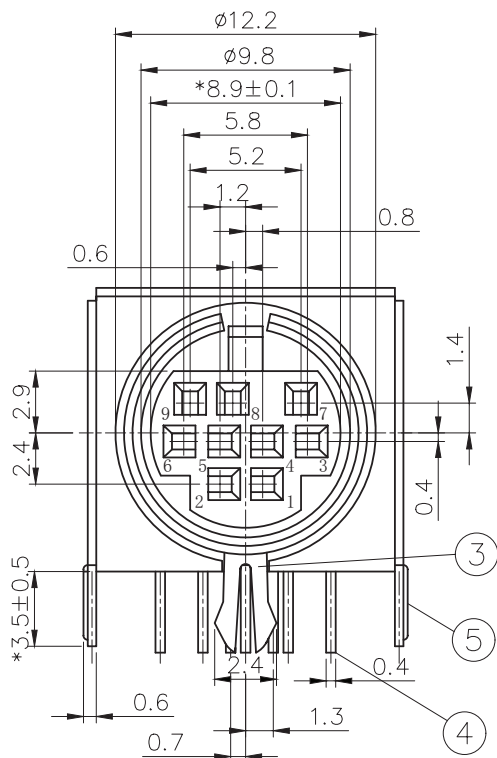
Recommended PCB Layout  
 Top View  
 [Date Codes after 03/03/2022]



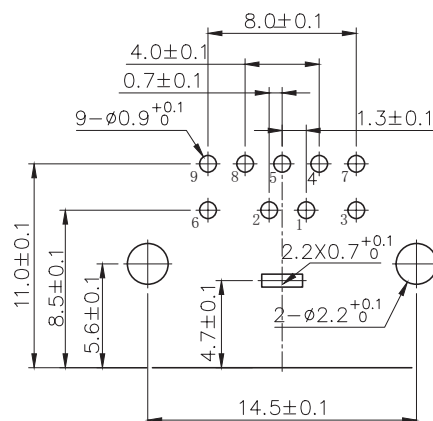
## MECHANICAL DRAWING (MD-90SM)

units: mm  
tolerance:  $\pm 0.3$  mm  
PCB:  $\pm 0.1$  mm  
unless otherwise noted

| ITEM | DESCRIPTION    | MATERIAL        | PLATING/COLOR |
|------|----------------|-----------------|---------------|
| 1    | body           | PBT (UL94V-0)   | black         |
| 2    | cover          | PBT (UL94V-0)   | black         |
| 3    | earth terminal | brass           | tin           |
| 4    | terminals      | phosphor bronze | silver        |
| 5    | shield         | SPCC            | tin           |



Recommended PCB Layout  
Top View  
(Date Codes prior to 03/03/2022)



Recommended PCB Layout  
Top View  
(Date Codes after 03/03/2022)

REVISION HISTORY

| rev. | description                       | date       |
|------|-----------------------------------|------------|
| 1.0  | initial release                   | 02/23/2006 |
| 1.01 | new template applied              | 02/22/2012 |
| 1.02 | updated datasheet                 | 08/25/2017 |
| 1.03 | added hand soldering details      | 01/19/2018 |
| 1.04 | updated housing, brand update     | 11/21/2019 |
| 1.05 | updated PCB footprints            | 08/11/2020 |
| 1.06 | modified design, changed factory  | 02/18/2022 |
| 1.07 | logo, datasheet style update      | 08/05/2022 |
| 1.08 | updated drawings                  | 11/23/2022 |
| 1.09 | CUI Devices rebranded to Same Sky | 09/12/2024 |

The revision history provided is for informational purposes only and is believed to be accurate.



Same Sky offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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