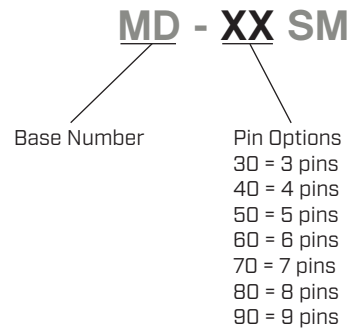


**SERIES:** MD-SM | **DESCRIPTION:** MINI DIN CONNECTOR**FEATURES**

- 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                     |     |           |        |            |

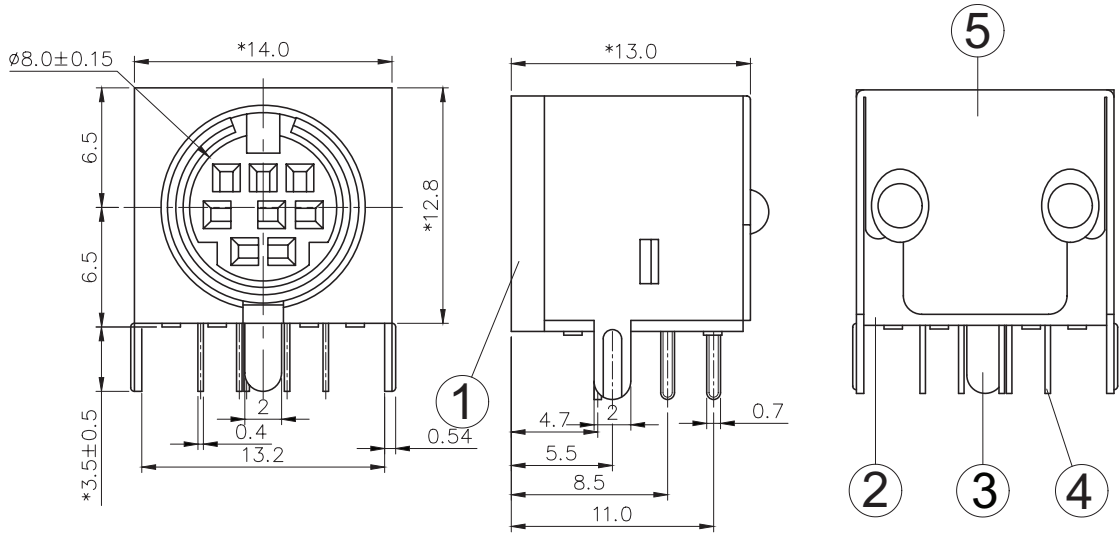
**SOLDERABILITY**

| 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

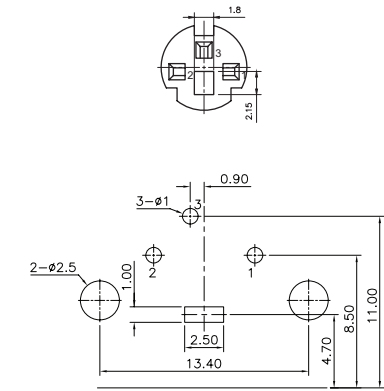
| ITEM | DESCRIPTION    | MATERIAL        | PLATING/COLOR |
|------|----------------|-----------------|---------------|
| 1    | body           | PBT (UL94V-0)   | black         |
| 2    | cover          | PBT (UL94V-0)   | black         |
| 3    | earth terminal | brass           | tin           |
|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



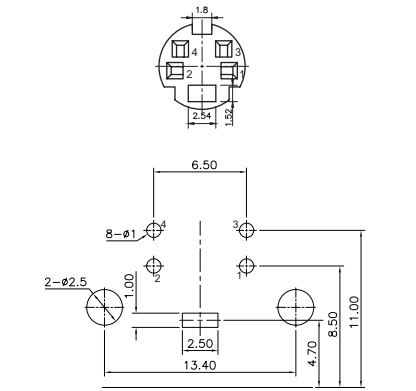
**MD-30SM**

**MD-40SM**

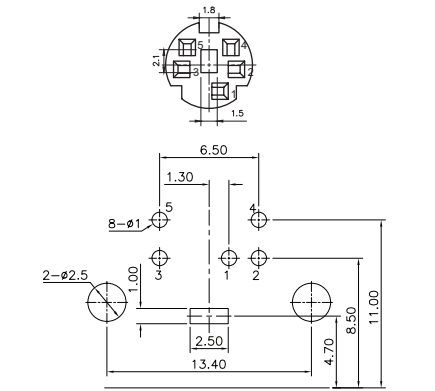
**MD-50SM**



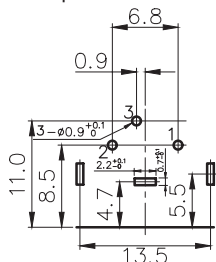
Recommended PCB Layout  
 Top View  
 (Date Codes prior to 03/03/2022)



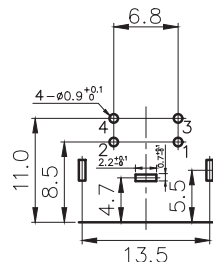
Recommended PCB Layout  
 Top View  
 (Date Codes prior to 03/03/2022)



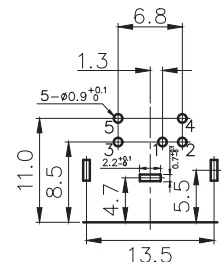
Recommended PCB Layout  
 Top View  
 (Date Codes prior to 03/03/2022)



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



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

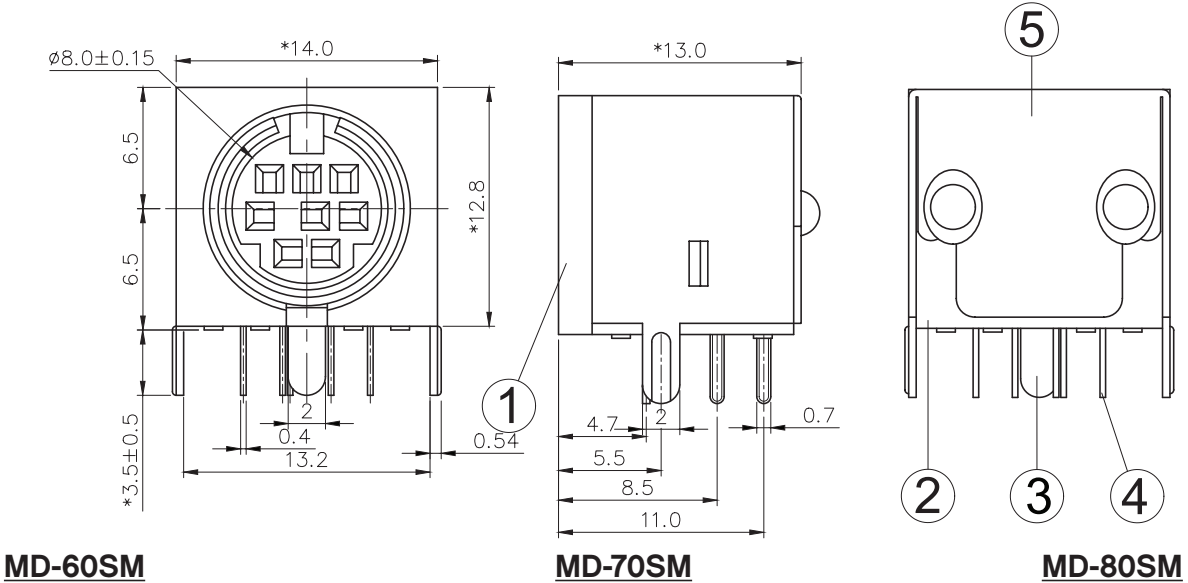


Recommended PCB Layout  
 Top View  
 (Date Codes after 03/03/2022)

## MECHANICAL DRAWINGS (MD-60SM, MD-70SM, MD-80SM)

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

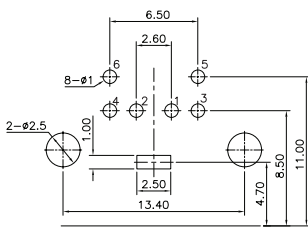
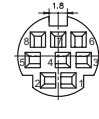
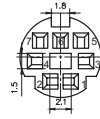
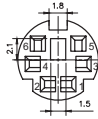
| ITEM | DESCRIPTION    | MATERIAL        | PLATING/COLOR |
|------|----------------|-----------------|---------------|
| 1    | body           | PBT (UL94V-0)   | black         |
| 2    | cover          | PBT (UL94V-0)   | black         |
| 3    | earth terminal | brass           | tin           |
|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



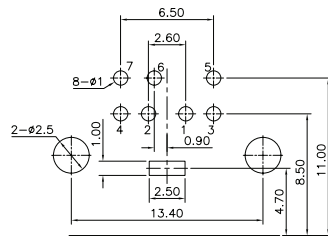
**MD-60SM**

**MD-70SM**

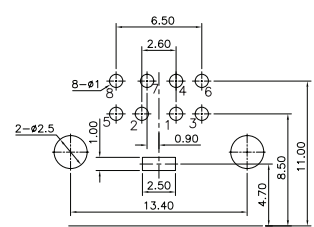
**MD-80SM**



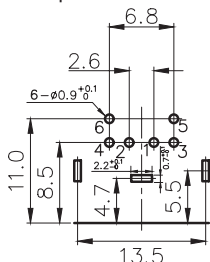
Recommended PCB Layout  
 Top View  
 (Date Codes prior to 03/03/2022)



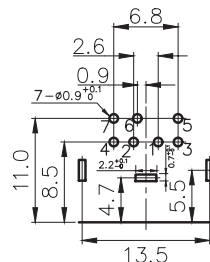
Recommended PCB Layout  
 Top View  
 (Date Codes prior to 03/03/2022)



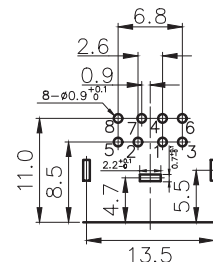
Recommended PCB Layout  
 Top View  
 (Date Codes prior to 03/03/2022)



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



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

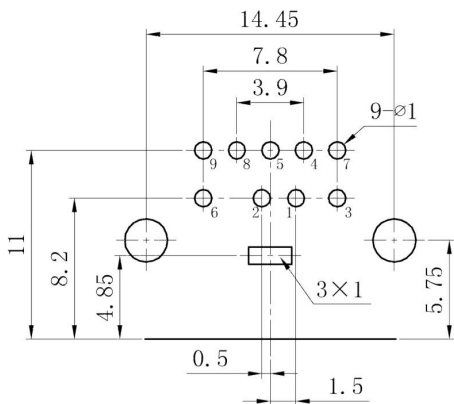
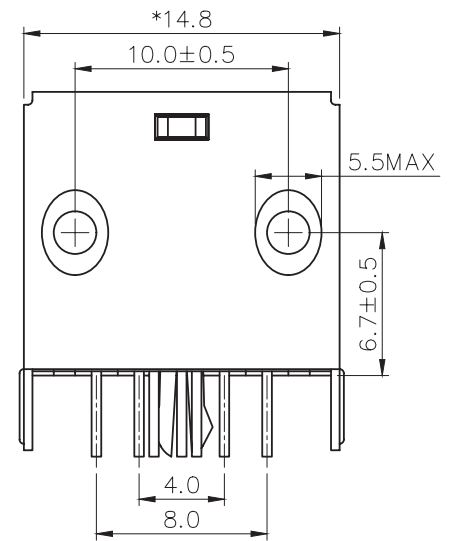
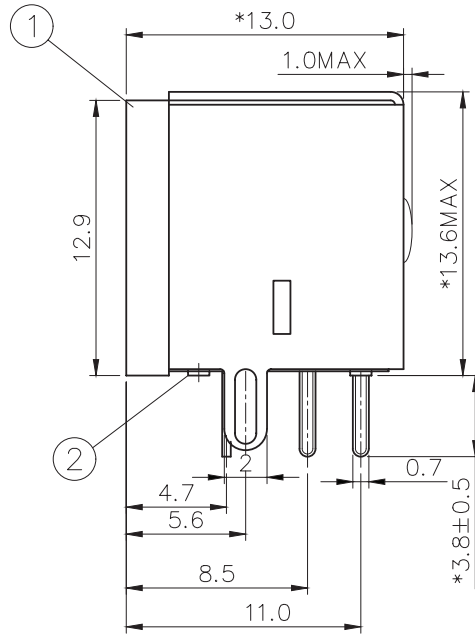
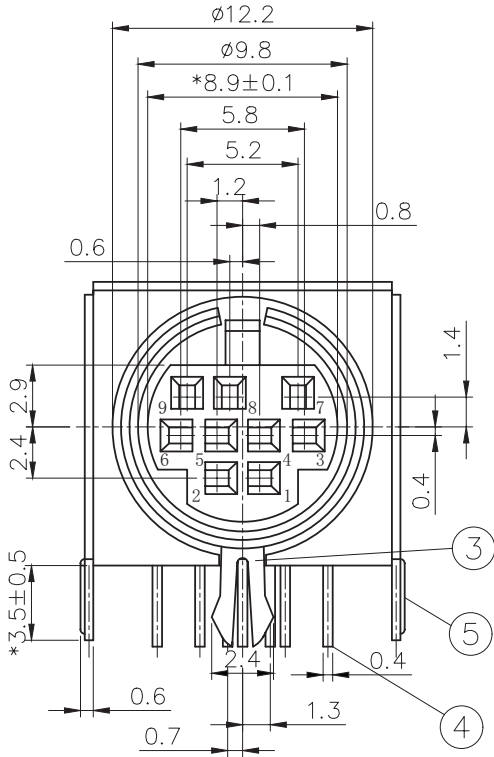


Recommended PCB Layout  
 Top View  
 (Date Codes after 03/03/2022)

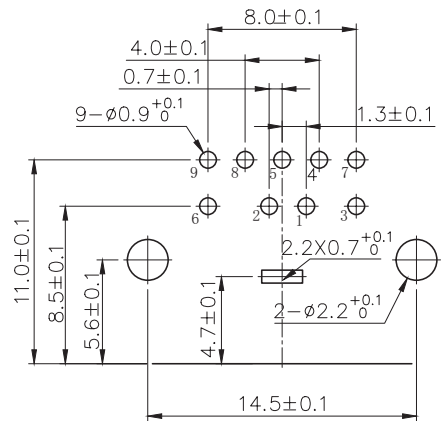
## MECHANICAL DRAWING (MD-90SM)

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.

Same Sky reserves the right to make changes to the product at any time without notice. Information provided by Same Sky is believed to be accurate and reliable. However, no responsibility is assumed by Same Sky for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

Same Sky products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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