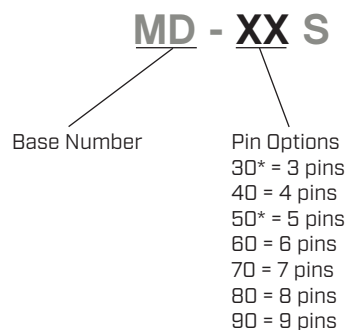


**SERIES:** MD-S | **DESCRIPTION:** MINI DIN CONNECTOR**FEATURES**

- PCB mount
- right angle
- non-shielded

**PART NUMBER KEY**

Notes: \*Discontinued models MD-30S &amp; MD-50S

**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     |                         |     |           | 250    | Vac        |
| insertion force       |                         | 0.8 |           | 6.0    | kg         |
| withdrawal force      |                         | 0.8 |           | 4.5    | kg         |
| operating temperature |                         | -40 |           | 85     | °C         |
| life                  |                         |     | 1,000     |        | cycles     |
| flammability rating   | UL94V-0                 |     |           |        |            |
| RoHS                  | yes                     |     |           |        |            |

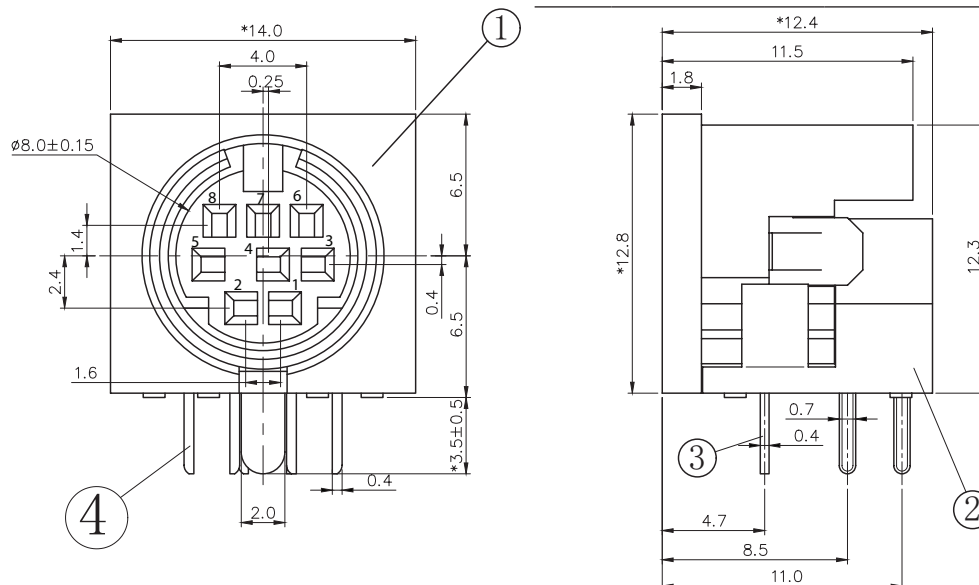
**SOLDERABILITY**

| 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    |

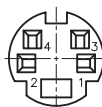
## MECHANICAL DRAWINGS (MD-30S, MD-40S, MD-50S)

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

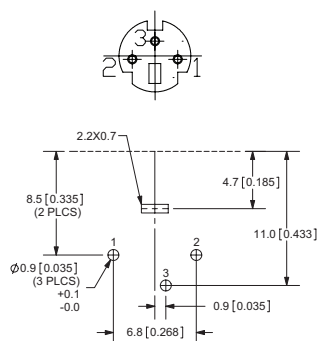
| ITEM | DESCRIPTION    | MATERIAL        | PLATING/COLOR |
|------|----------------|-----------------|---------------|
| 1    | body           | PBT (UL94V-0)   | black         |
| 2    | cover          | PBT (UL94V-0)   | black         |
| 3    | earth terminal | brass           | tin           |
|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



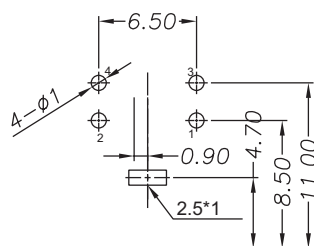
**MD-40S**



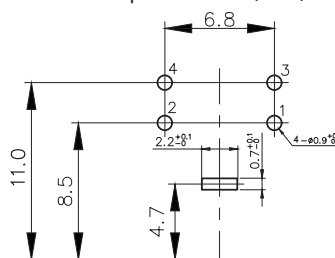
**MD-30S**



Recommended PCB Layout  
Top View

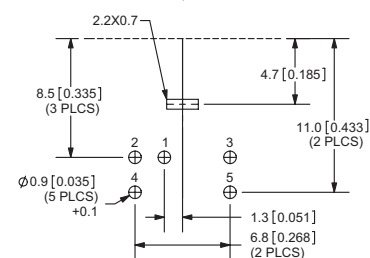
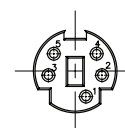


Recommended PCB Layout  
Top View  
[Date Codes prior to 03/03/2022]



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

**MD-50S**

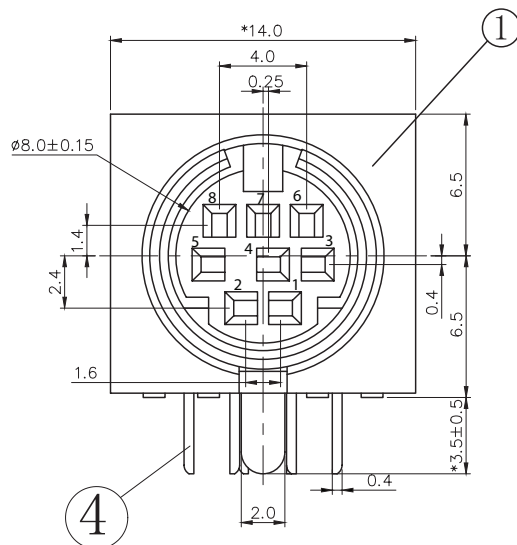
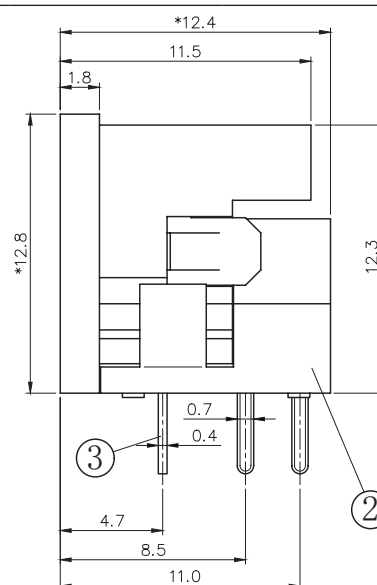
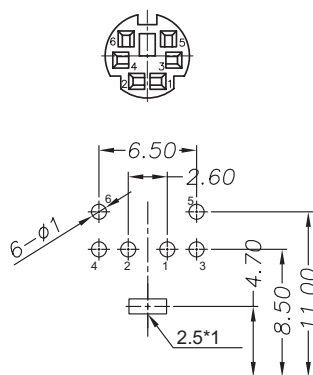


Recommended PCB Layout  
Top View

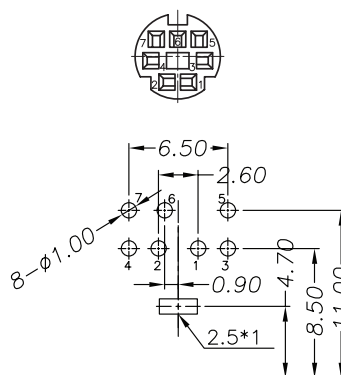
## MECHANICAL DRAWINGS (MD-60S, MD-70S, MD-80S)

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

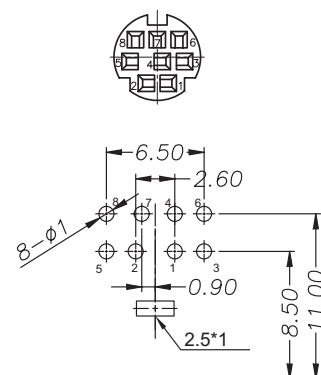
| ITEM | DESCRIPTION    | MATERIAL        | PLATING/COLOR |
|------|----------------|-----------------|---------------|
| 1    | body           | PBT (UL94V-0)   | black         |
| 2    | cover          | PBT (UL94V-0)   | black         |
| 3    | earth terminal | brass           | tin           |
|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

**MD-60S****MD-70S****MD-80S**

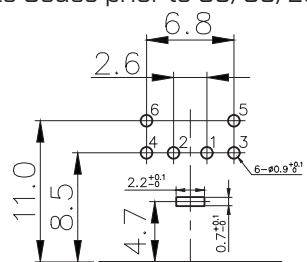
Recommended PCB Layout  
Top View  
(Date Codes prior to 03/03/2022)



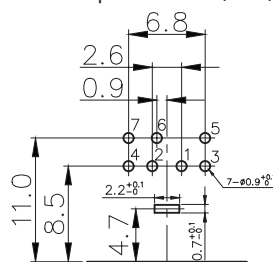
Recommended PCB Layout  
Top View  
(Date Codes prior to 03/03/2022)



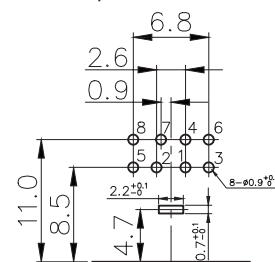
Recommended PCB Layout  
Top View  
(Date Codes prior to 03/03/2022)



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



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

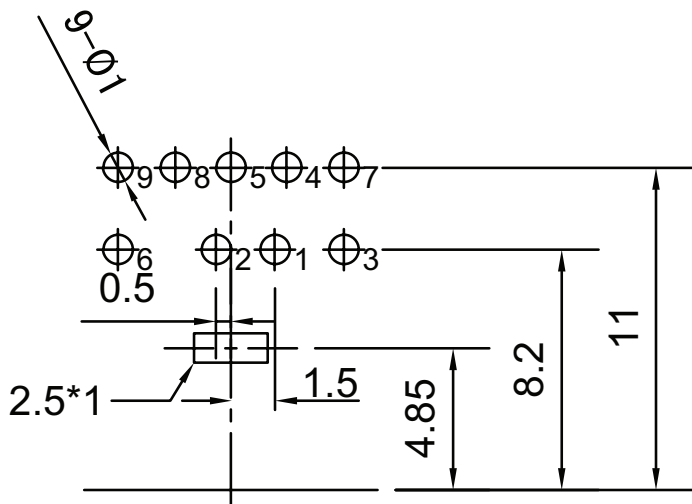
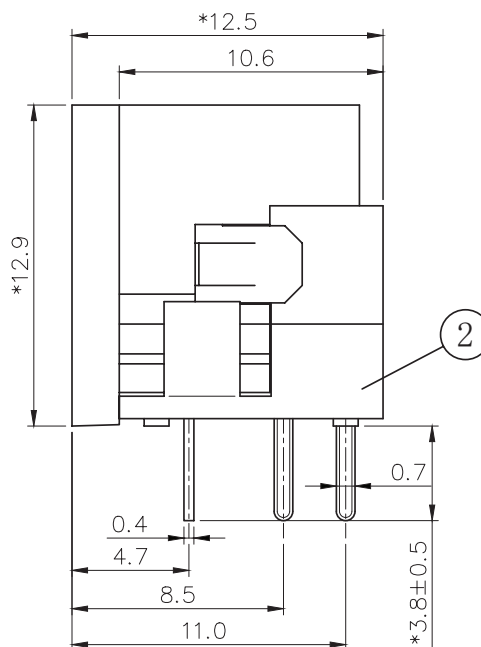
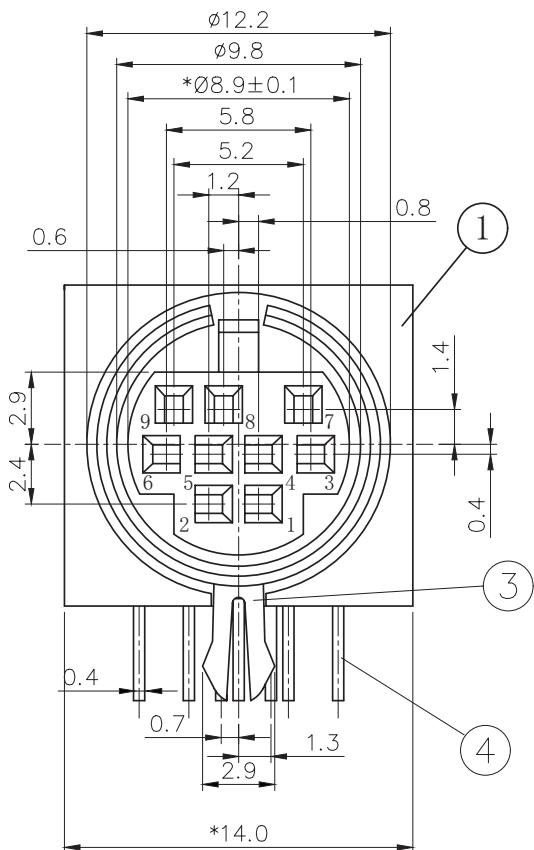


Recommended PCB Layout  
Top View  
(Date Codes after 03/03/2022)

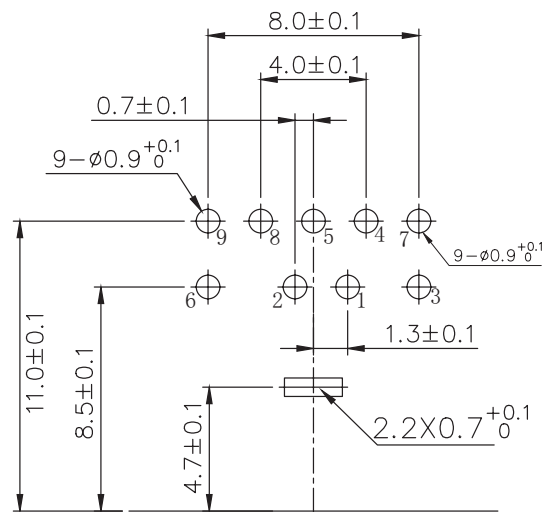
## MECHANICAL DRAWING (MD-90S)

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        |



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                                | 02/16/2012 |
| 1.02 | housing updates                                     | 03/29/2012 |
| 1.03 | updated datasheet                                   | 08/25/2017 |
| 1.04 | discontinued models MD-30S and MD-50S, brand update | 10/08/2019 |
| 1.05 | updated housing                                     | 12/12/2019 |
| 1.06 | updated PCB footprints                              | 09/01/2020 |
| 1.07 | modified design, changed factory                    | 02/18/2022 |
| 1.08 | logo, datasheet style update                        | 08/05/2022 |

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



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