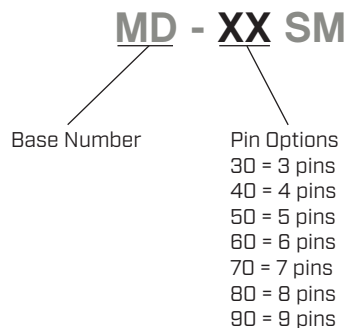


SERIES: MD-SM | **DESCRIPTION:** MINI DIN CONNECTOR**FEATURES**

- PCB mount
- right angle
- side shielded

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

| parameter | conditions/description | min | typ | max | units |
|-----------------------|-------------------------|-----|-----------|--------|------------|
| rated input voltage | | | 100 12 | | Vac Vdc |
| rated input current | at 100 Vac at 12 Vdc | | | 1 2 | A 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 | | | | |

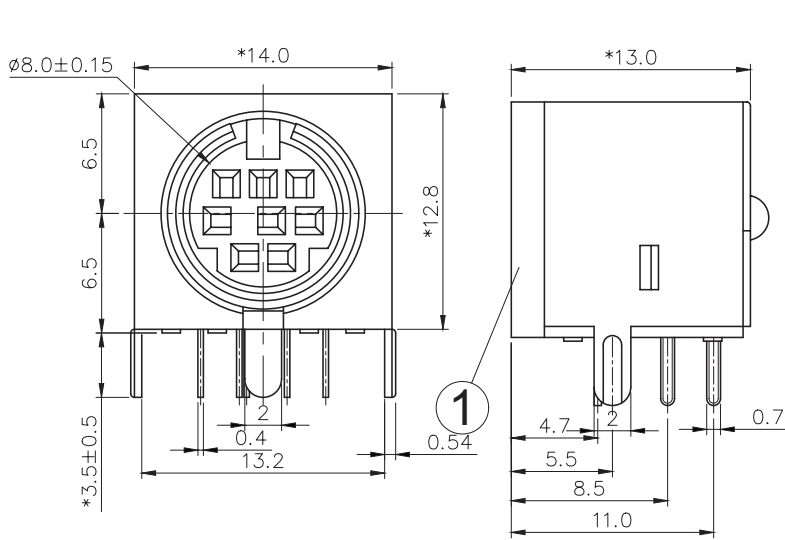
SOLDERABILITY

| 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: ±0.3 mm
 PCB: ±0.1 mm
 unless otherwise noted

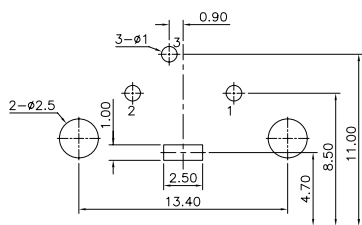
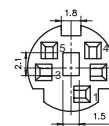
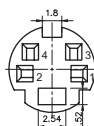
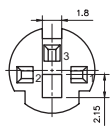
| ITEM | DESCRIPTION | MATERIAL | PLATING/COLOR |
|------|----------------|-----------------|---------------|
| 1 | body | PBT (UL94V-0) | black |
| 2 | cover | PBT (UL94V-0) | black |
| 3 | earth terminal | brass | tin |
| 4 | terminals | phosphor bronze | silver |
| 5 | shield | SPCC | tin |



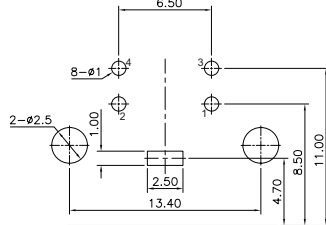
MD-30SM

MD-40SM

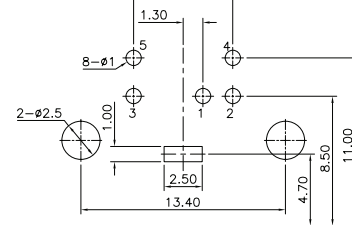
MD-50SM



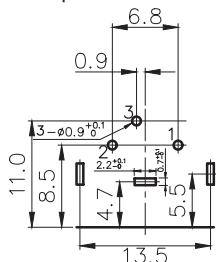
Recommended PCB Layout
 Top View
 (Date Codes prior to 03/03/2022)



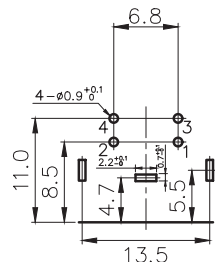
Recommended PCB Layout
 Top View
 (Date Codes prior to 03/03/2022)



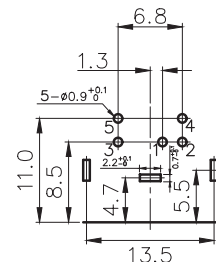
Recommended PCB Layout
 Top View
 (Date Codes prior to 03/03/2022)



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



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

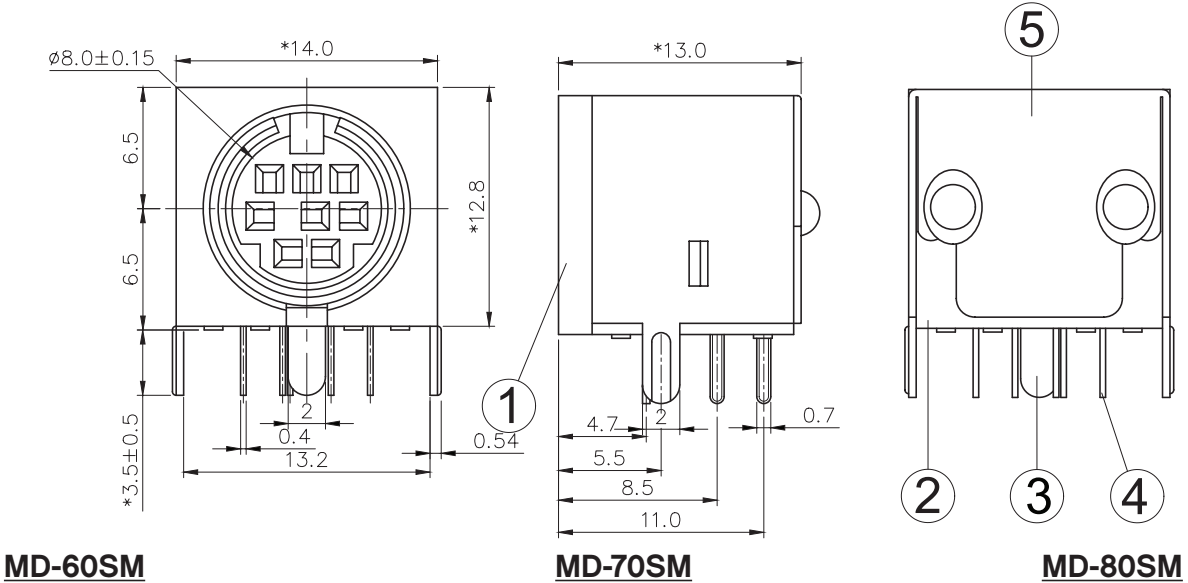


Recommended PCB Layout
 Top View
 (Date Codes after 03/03/2022)

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

units: mm
 tolerance: ± 0.3 mm
 PCB: ± 0.1 mm
 unless otherwise noted

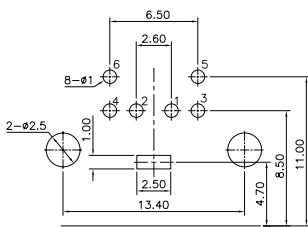
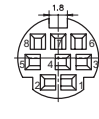
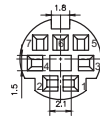
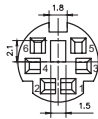
| ITEM | DESCRIPTION | MATERIAL | PLATING/COLOR |
|------|----------------|-----------------|---------------|
| 1 | body | PBT (UL94V-0) | black |
| 2 | cover | PBT (UL94V-0) | black |
| 3 | earth terminal | brass | tin |
| 4 | terminals | phosphor bronze | silver |
| 5 | shield | SPCC | tin |



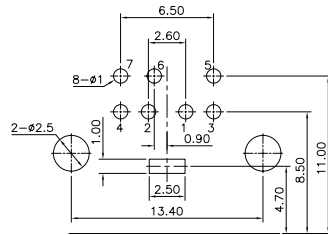
MD-60SM

MD-70SM

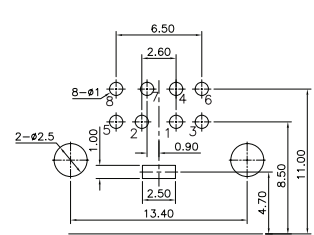
MD-80SM



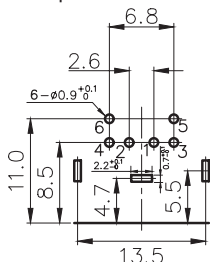
Recommended PCB Layout
 Top View
 (Date Codes prior to 03/03/2022)



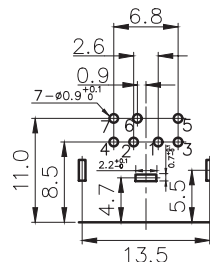
Recommended PCB Layout
 Top View
 (Date Codes prior to 03/03/2022)



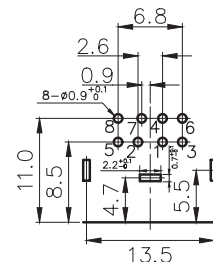
Recommended PCB Layout
 Top View
 (Date Codes prior to 03/03/2022)



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



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

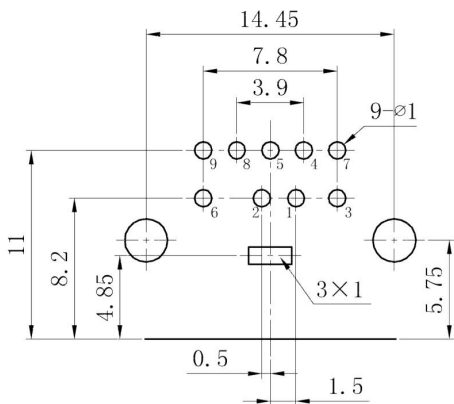
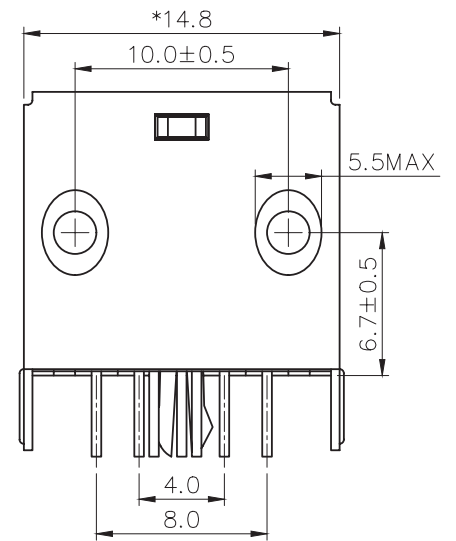
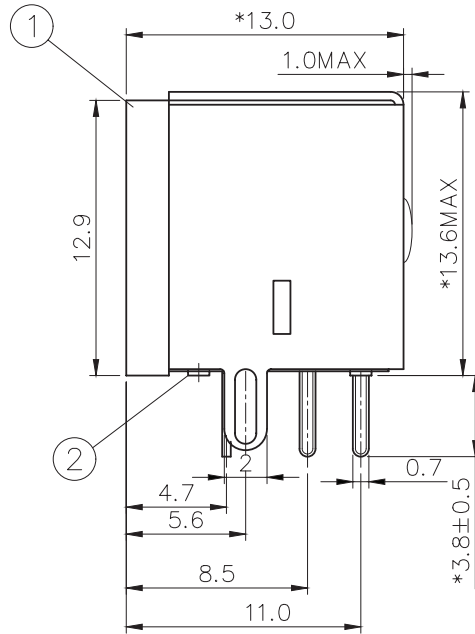
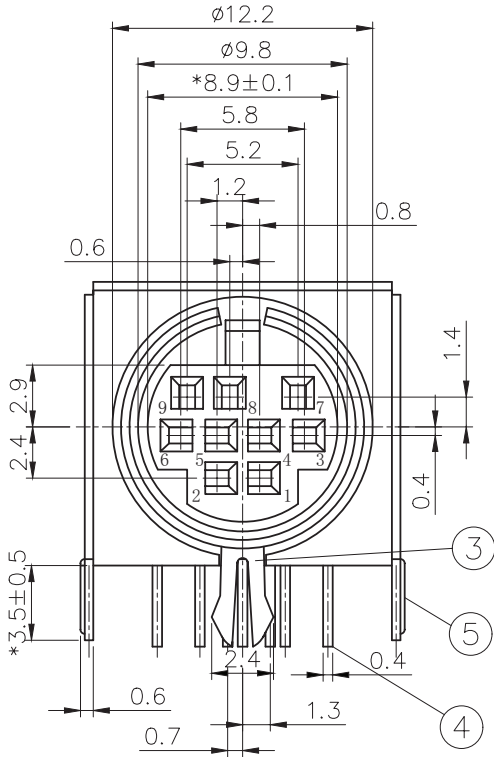


Recommended PCB Layout
 Top View
 (Date Codes after 03/03/2022)

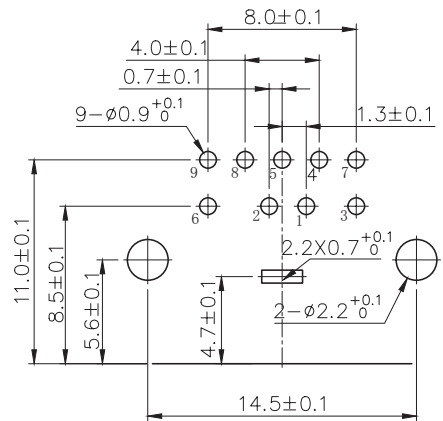
MECHANICAL DRAWING (MD-90SM)

units: mm
 tolerance: ± 0.3 mm
 PCB: ± 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 |

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



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