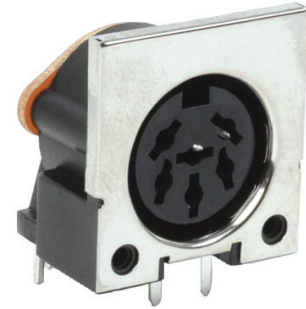
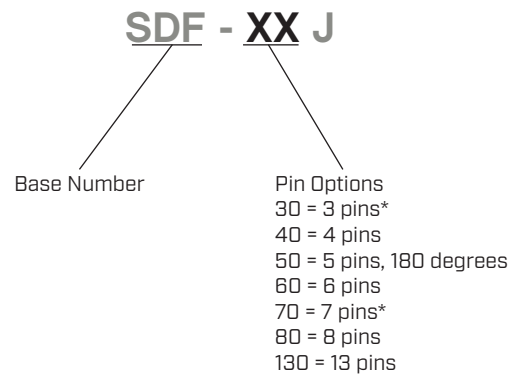


**SERIES:** SDF-J | **DESCRIPTION:** STANDARD DIN CONNECTOR**FEATURES**

- PCB mount
- front shielded
- right angle

**PART NUMBER KEY**

\* Discontinued models SDF-30J & SDF-70J.

**SPECIFICATIONS**

| parameter             | conditions/description  | min | typ       | max    | units      |
|-----------------------|-------------------------|-----|-----------|--------|------------|
| rated input voltage   |                         |     | 100<br>24 |        | Vac<br>Vdc |
| rated input current   | at 100 Vac<br>at 24 Vdc |     |           | 2<br>1 | A<br>A     |
| contact resistance    |                         |     |           | 20     | mΩ         |
| insulation resistance | at 500 Vdc              | 100 |           |        | MΩ         |
| voltage withstand     | for 1 minute            |     |           | 500    | Vac        |
| insertion force       |                         |     |           | 6.5    | kg         |
| withdrawal force      |                         | 1   |           | 5.0    | kg         |
| operating temperature |                         | -40 |           | 85     | °C         |
| life                  |                         |     | 1,000     |        | cycles     |
| flammability rating   | UL94V-0                 |     |           |        |            |
| RoHS                  | yes                     |     |           |        |            |

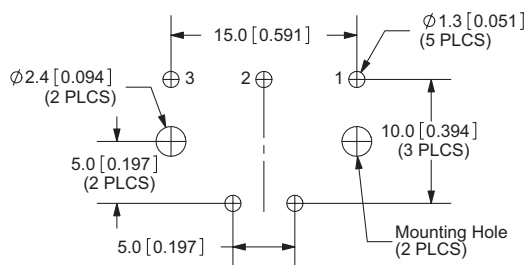
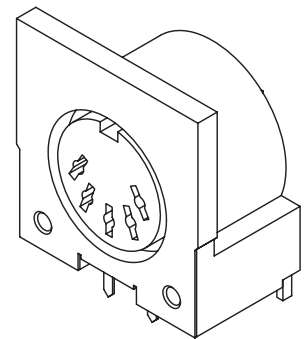
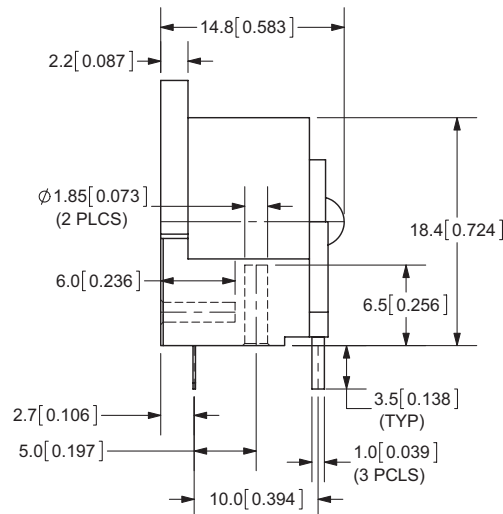
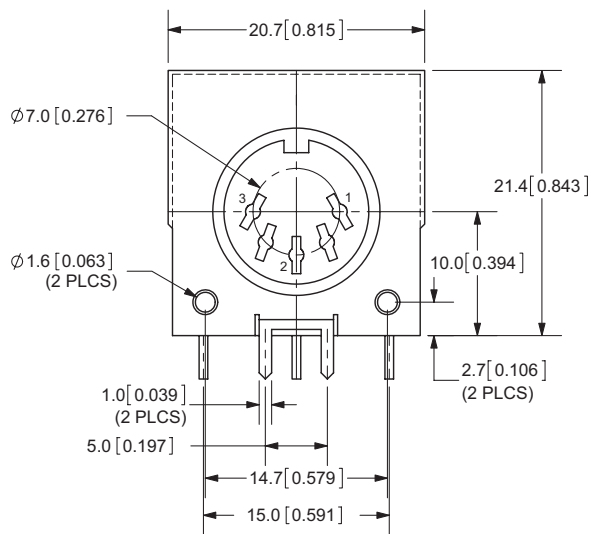
**SOLDERABILITY**

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

## MECHANICAL DRAWING (SDF-30J)

units: mm  
tolerance:  $\pm 0.3$  mm

| ITEM | DESCRIPTION       | MATERIAL      | PLATING/COLOR |
|------|-------------------|---------------|---------------|
| 1    | body              | PBT [UL94V-0] | black         |
| 2    | shielded terminal | brass         | nickel        |
| 3    | plate             | bakelite      |               |
| 4    | terminals         | brass         | tin           |



Recommended PCB Layout  
Top View

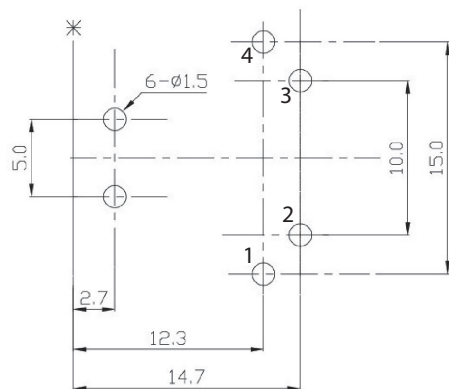
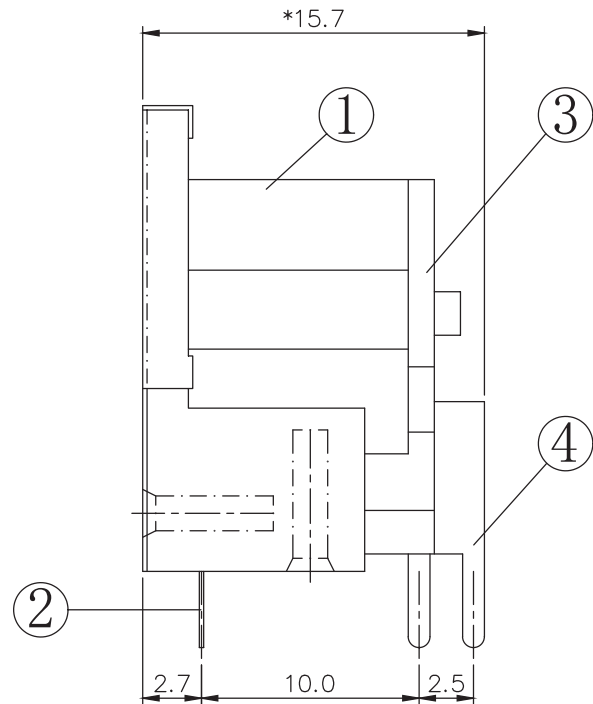
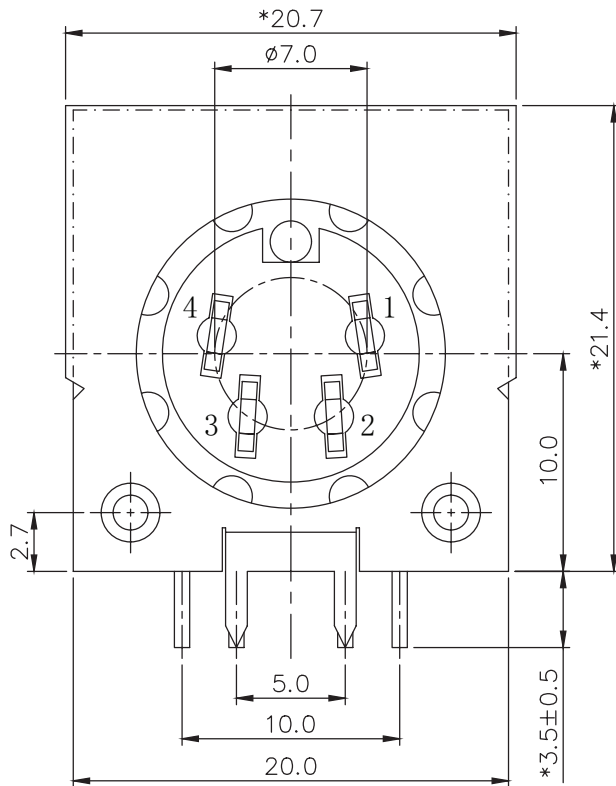
## MECHANICAL DRAWING (SDF-40J)

units: mm

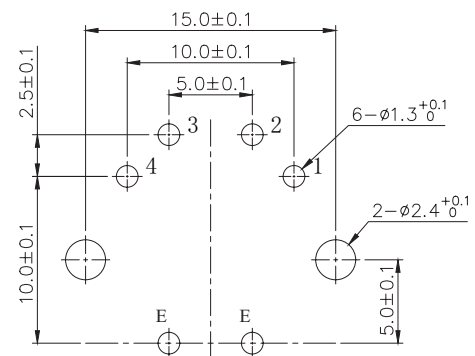
tolerance:  $\pm 0.3$  mm

unless otherwise noted

| ITEM | DESCRIPTION     | MATERIAL      | PLATING/COLOR |
|------|-----------------|---------------|---------------|
| 1    | body            | PBT [UL94V-0] | black         |
| 2    | shield terminal | brass         | nickel        |
| 3    | plate           | bakelite      |               |
| 4    | contact         | brass         | tin           |



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

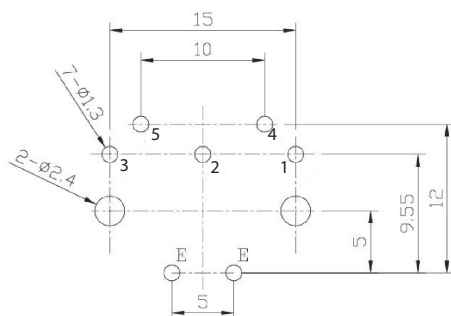
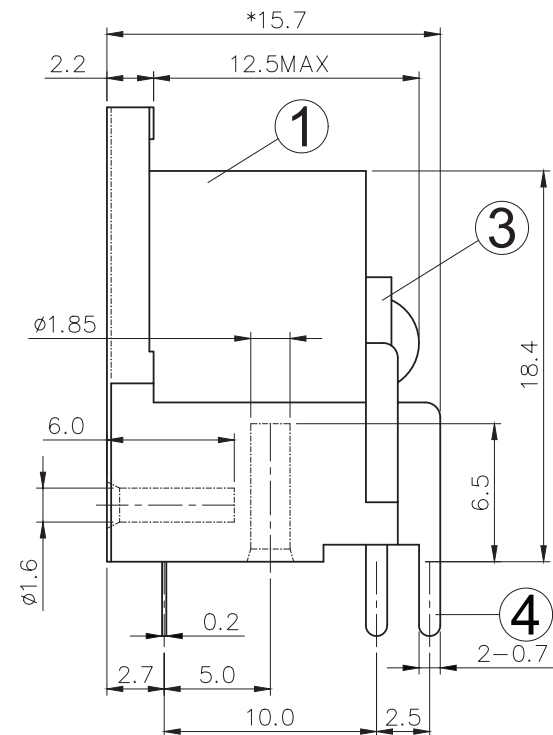
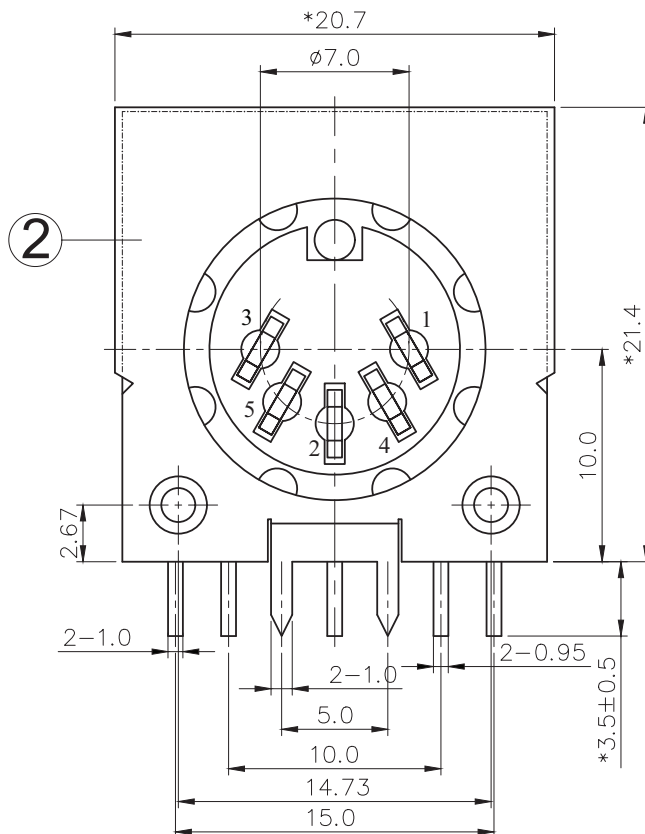


Recommended PCB Layout  
Top View  
[Date Codes after 03/03/2022]

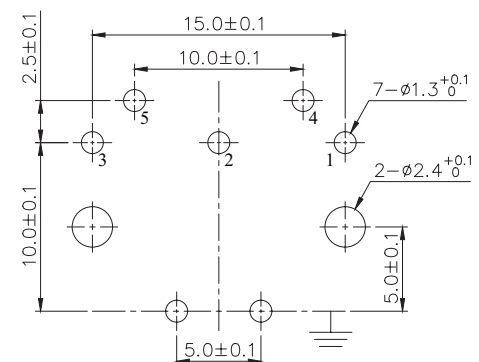
## MECHANICAL DRAWING (SDF-50J)

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

| ITEM | DESCRIPTION    | MATERIAL      | PLATING/COLOR |
|------|----------------|---------------|---------------|
| 1    | body           | PBT [UL94V-0] | black         |
| 2    | earth terminal | brass         | nickel        |
| 3    | plate          | bakelite      |               |
| 4    | contact        | brass         | tin           |



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



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

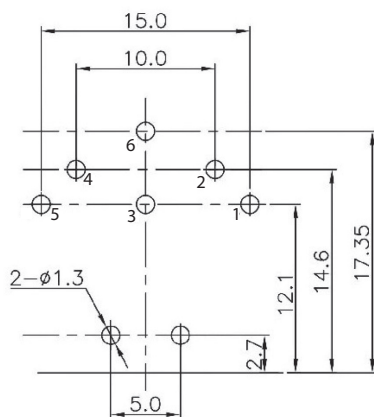
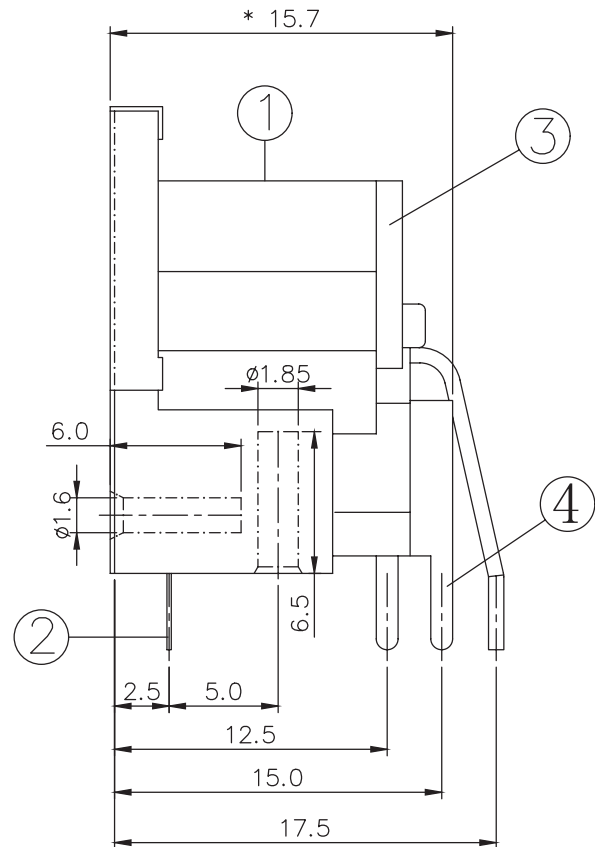
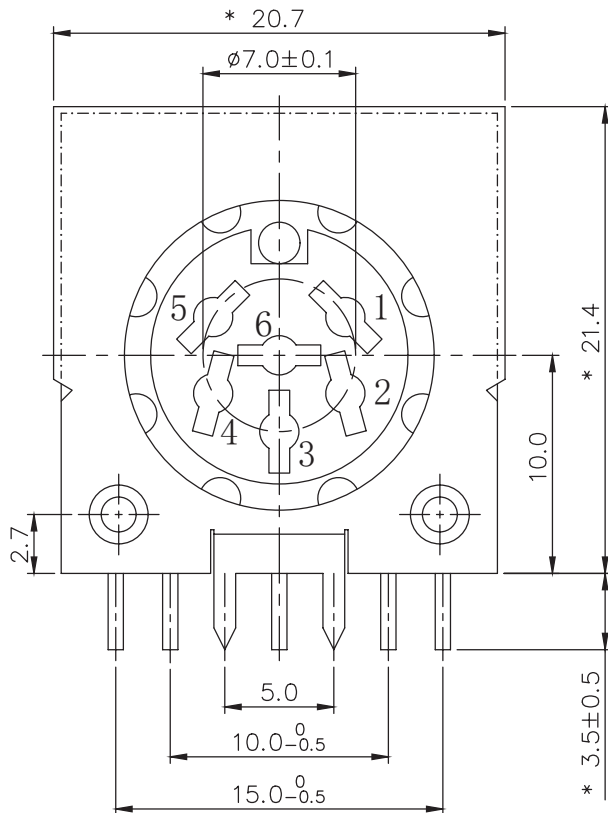
## MECHANICAL DRAWING (SDF-60J)

units: mm

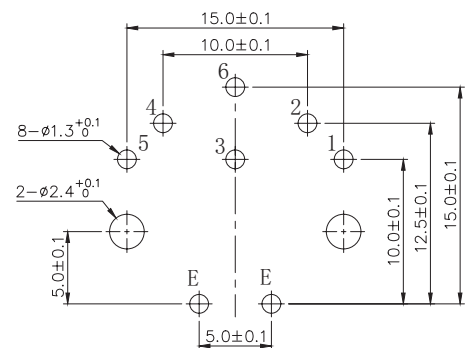
tolerance:  $\pm 0.3$  mm

unless otherwise noted

| ITEM | DESCRIPTION    | MATERIAL      | PLATING/COLOR |
|------|----------------|---------------|---------------|
| 1    | body           | PBT [UL94V-0] | black         |
| 2    | earth terminal | brass         | nickel        |
| 3    | plate          | bakelite      |               |
| 4    | contact        | brass         | tin           |



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

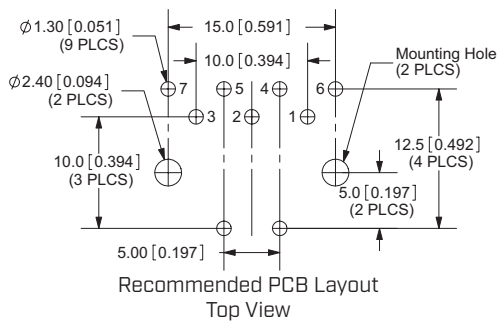
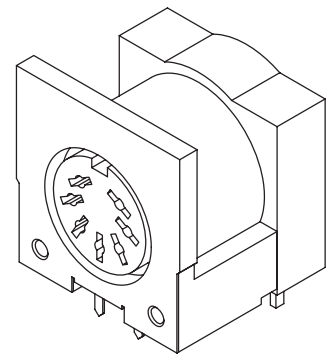
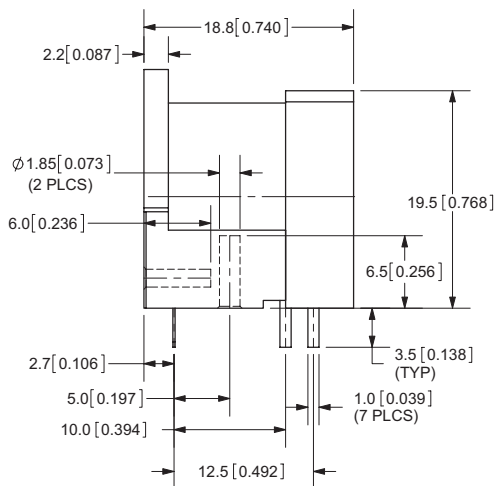
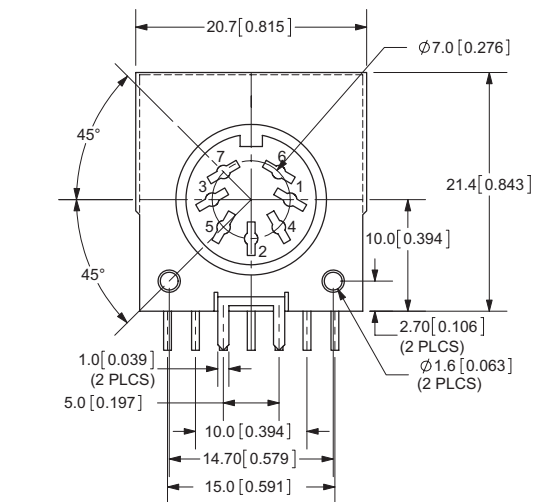


Recommended PCB Layout  
Top View  
(Date Codes after 03/03/2022)

## MECHANICAL DRAWING (SDF-70J)

units: mm  
tolerance:  $\pm 0.2$ mm

|                   | MATERIAL | PLATING |
|-------------------|----------|---------|
| housing           | PBT      | black   |
| shielded terminal | brass    | nickel  |
| terminal          | brass    | tin     |

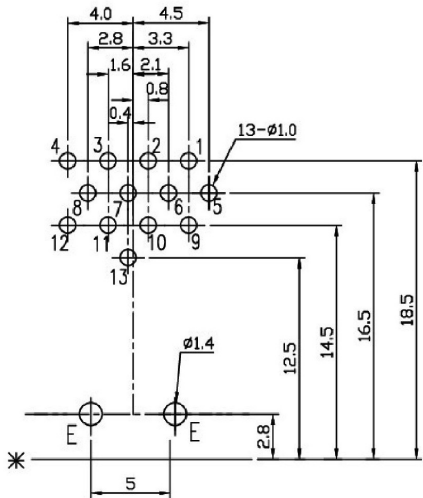
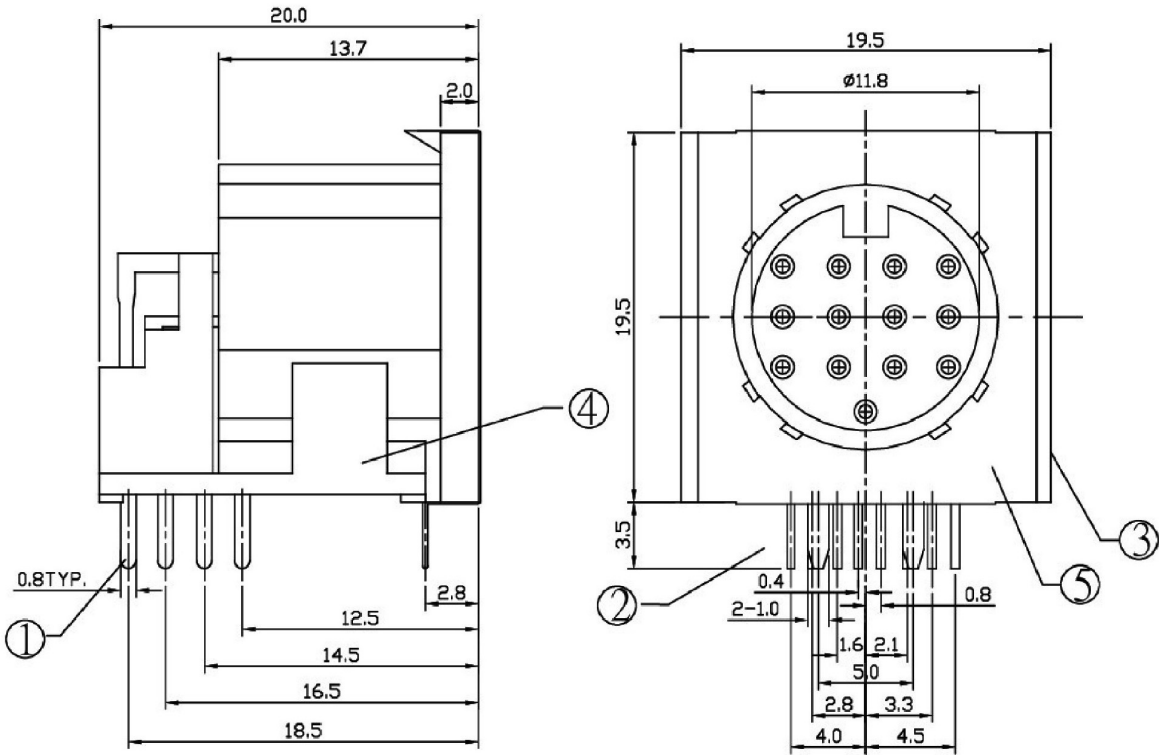




MECHANICAL DRAWING (SDF-130J)

units: mm  
tolerance: ±0.30 mm  
PCB: ±0.05 mm

|   |                | MATERIAL            | PLATING    |
|---|----------------|---------------------|------------|
| 1 | terminal       | phosphor bronze     | silver     |
| 2 | ground contact | phosphor bronze     | silver     |
| 3 | housing        | PBT 4815<br>UL94V-0 | black      |
| 4 | cover          | PBT 4815<br>UL94V-0 | black      |
| 5 | sealed plate   | copper alloy        | copper/tin |



Recommended PCB Layout  
Top View

## REVISION HISTORY

| rev. | description                                                                  | date       |
|------|------------------------------------------------------------------------------|------------|
| 1.0  | initial release                                                              | 02/23/2006 |
| 1.01 | new template applied                                                         | 04/02/2012 |
| 1.02 | updated housings                                                             | 04/05/2012 |
| 1.03 | corrected SDF-50J and SDF-51J pinouts                                        | 07/15/2014 |
| 1.04 | updated datasheet                                                            | 09/08/2017 |
| 1.05 | updated datasheet                                                            | 07/24/2018 |
| 1.06 | discontinued model SDF-30J                                                   | 10/08/2019 |
| 1.07 | discontinued model SDF-70J                                                   | 02/17/2020 |
| 1.08 | changed housing                                                              | 04/13/2020 |
| 1.09 | modified design and changed factory for SDF-40J, SDF-50J, SDF-60J, & SDF-80J | 02/21/2022 |
| 1.10 | 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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