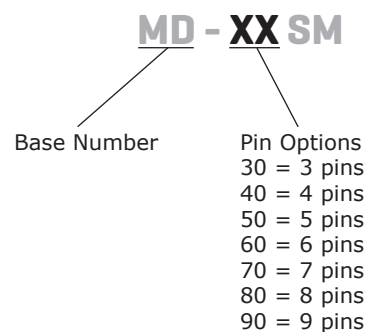


**SERIES:** MD-SM | **DESCRIPTION:** MINI DIN CONNECTOR**FEATURES**

- PCB mount
- right angle
- side shielded

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

parameter	conditions/description	min	typ	max	units
rated input voltage			30		Vdc
rated input current				1	A
contact resistance				30	mΩ
insulation resistance		1000			MΩ
voltage withstand	for 1 minute			500	Vac
insertion force				45	N
withdrawal force		7			N
operating temperature		-25		50	°C
life			500		cycles
flammability rating	UL94V-0				
RoHS	yes				

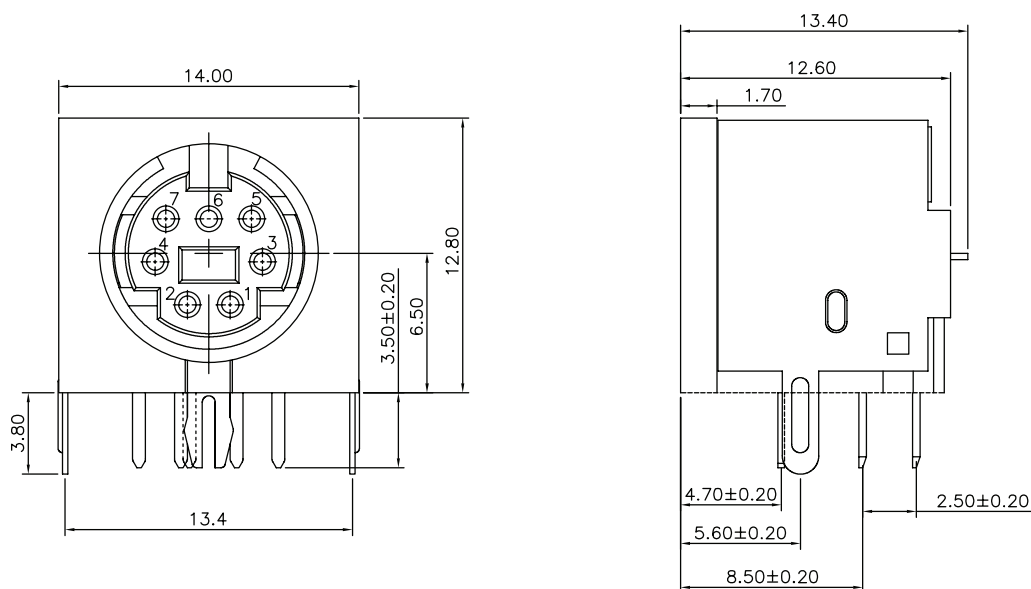
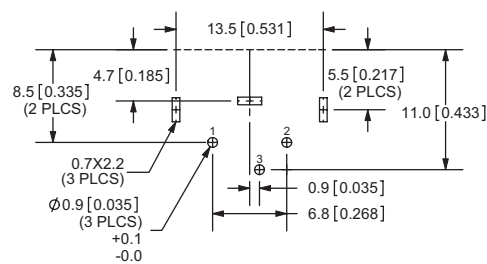
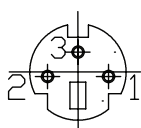
**SOLDERABILITY**

parameter	conditions/description	min	typ	max	units
hand soldering	for 1~3 seconds	230		250	°C

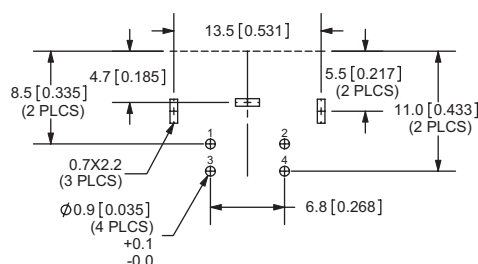
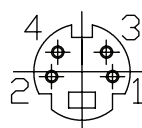
**MECHANICAL DRAWING (MD-30SM, MD-40SM, MD-50SM)**

units: mm  
 tolerance:  
 X.X  $\pm 0.38$  mm  
 X.XX  $\pm 0.25$  mm  
 X.XXX  $\pm 0.13$  mm

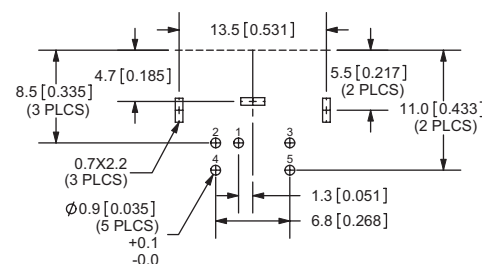
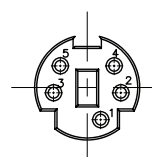
	MATERIAL	PLATING
body	PBT+30%GF (UL94V-0)	
pins	brass	tin
shield	brass	nickel

**MD-30SM**

Recommended PCB Layout  
Top View

**MD-40SM**

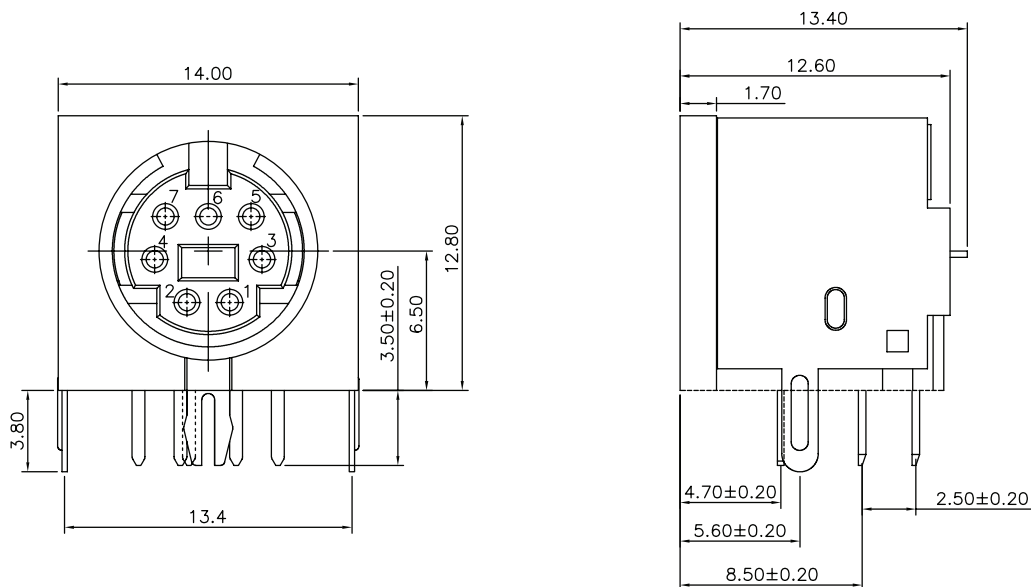
Recommended PCB Layout  
Top View

**MD-50SM**

Recommended PCB Layout  
Top View

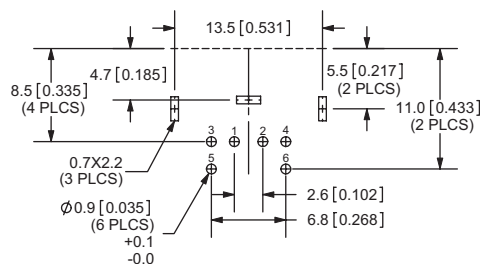
units: mm  
tolerance:  
X.X  $\pm 0.38$  mm  
X.XX  $\pm 0.25$  mm  
X.XXX  $\pm 0.13$  mm

	MATERIAL	PLATING
body	PBT+ 30%GF (UL94V-0)	
pins	brass	tin
shield	brass	nickel



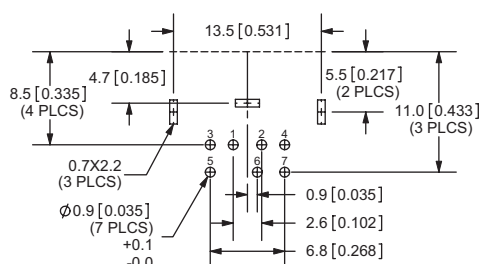
A diagram of a circular cross-section of a mechanical part. The part has a central rectangular hole. There are seven smaller circular holes arranged around the center, numbered 1 through 7. The numbering is as follows: 1 and 2 are at the bottom; 3, 4, and 5 are on the right side; 6 and 7 are on the left side. The part is symmetrical about a vertical centerline.

A circular board with a central cross. The board is divided into 8 numbered positions (1-8) by the cross and two diagonal lines. The positions are numbered as follows: 1 is at the bottom center, 2 is at the bottom-left, 3 is at the right, 4 is at the center-right, 5 is at the left, 6 is at the top-right, 7 is at the top-center, and 8 is at the top-left.

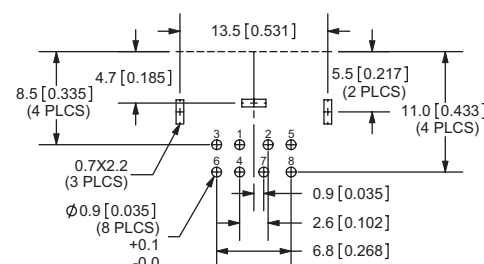


### Recommended PCB Layout

#### Top View



Recommended PCB Layout  
Top View



### Recommended PCB Layout Top View

## MECHANICAL DRAWING (MD-90SM)

units: mm

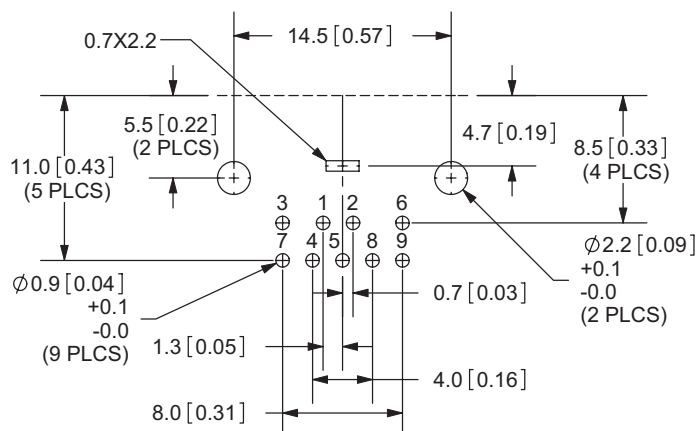
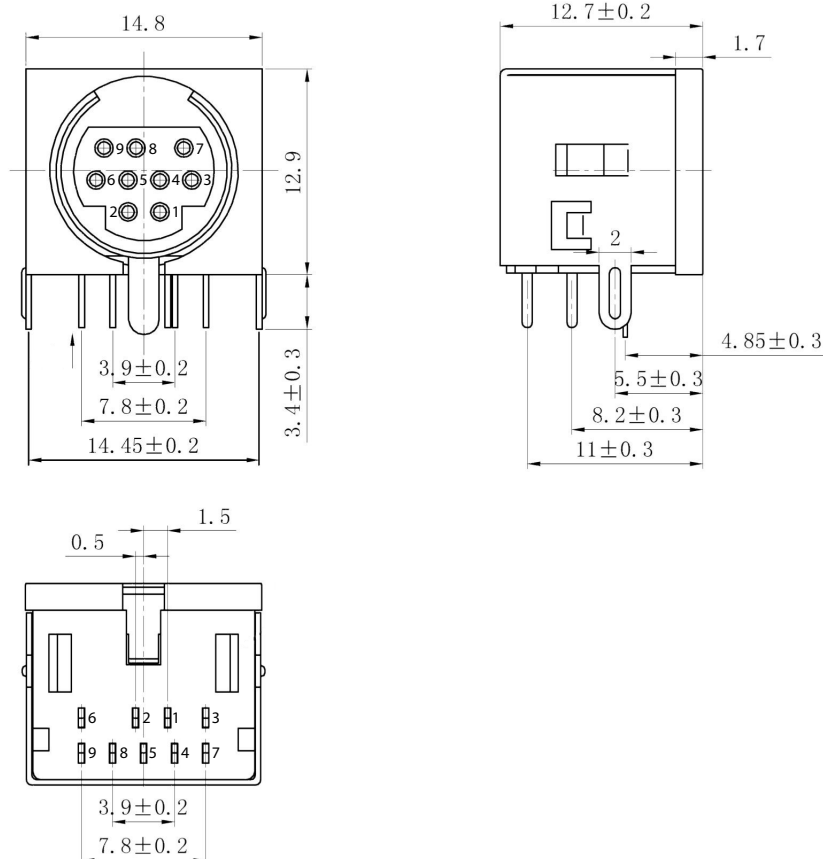
tolerance:

X.X ±0.35 mm

X.XX ±0.25 mm

X.XXX ±0.15 mm

	MATERIAL	PLATING
body	PBT (UL94V-0)	
cover	PBT (UL94V-0)	
ground	brass	tin
pins	brass	tin
shield	brass	tin



### Recommended PCB Layout Top View

## 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

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

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