

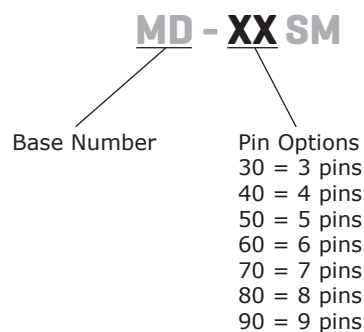
## SERIES: MD-SM | DESCRIPTION: MINI DIN CONNECTOR

### 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				

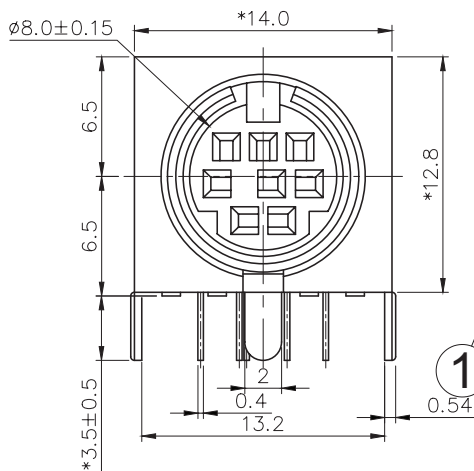
### SOLDERABILITY

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

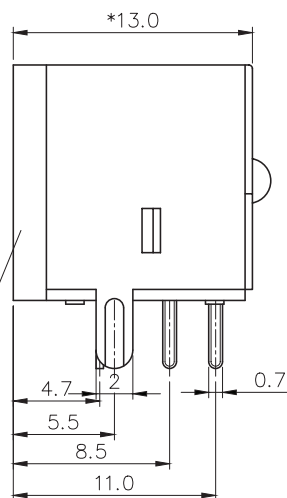
## MECHANICAL DRAWINGS (MD-30SM, MD-40SM, MD-50SM)

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

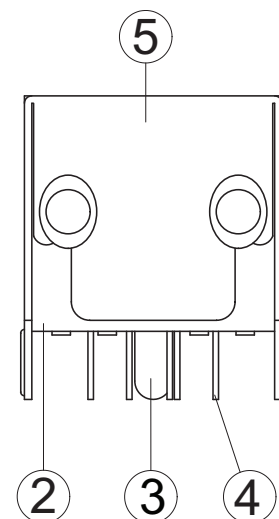
ITEM	DESCRIPTION	MATERIAL	PLATING/COLOR
1	body	PBT (UL94V-0)	black
2	cover	PBT (UL94V-0)	black
3	earth terminal	brass	tin
4	terminals	phosphor bronze	silver
5	shield	SPCC	tin



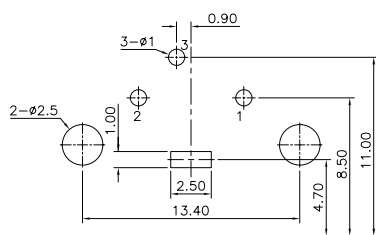
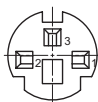
**MD-30SM**



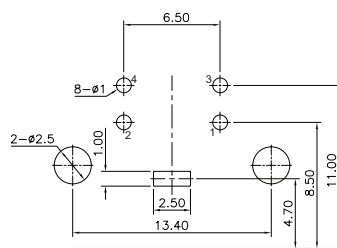
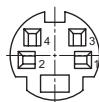
**MD-40SM**



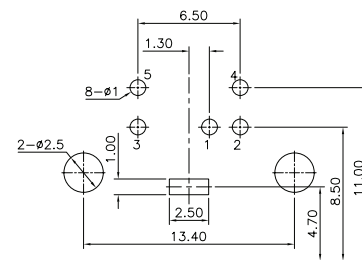
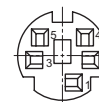
**MD-50SM**



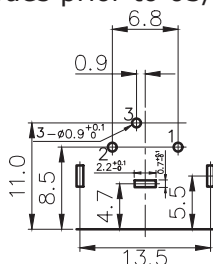
Recommended PCB Layout  
 Top View  
 (Date Codes prior to 03/03/2022)



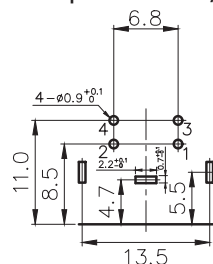
Recommended PCB Layout  
 Top View  
 (Date Codes prior to 03/03/2022)



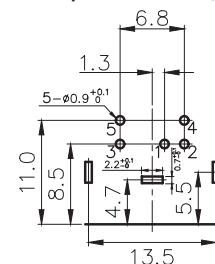
Recommended PCB Layout  
 Top View  
 (Date Codes prior to 03/03/2022)



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



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

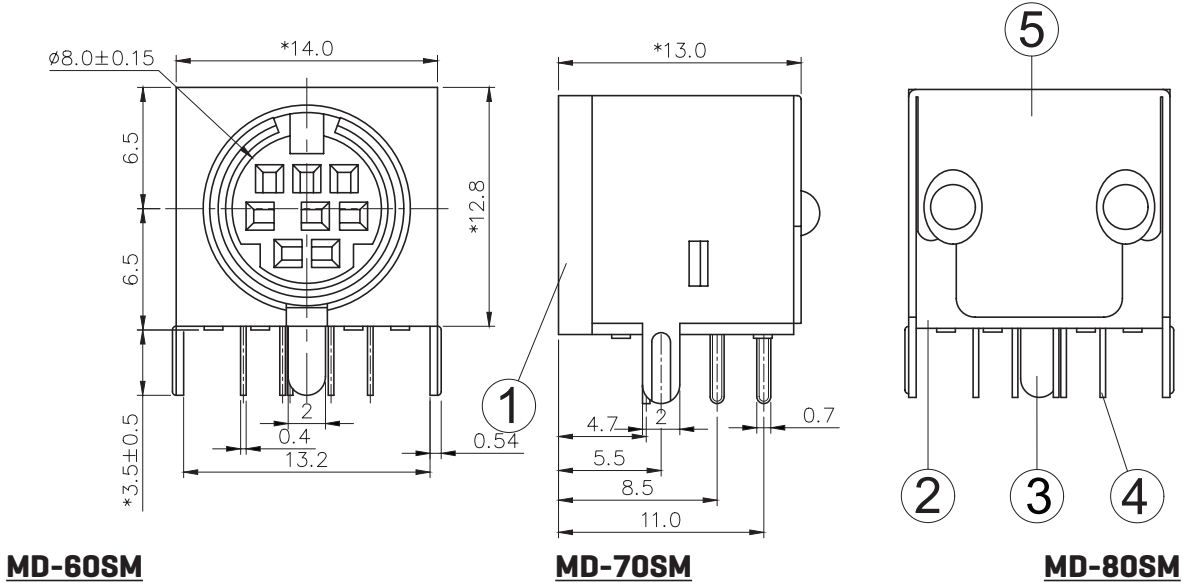


Recommended PCB Layout  
 Top View  
 (Date Codes after 03/03/2022)

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

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

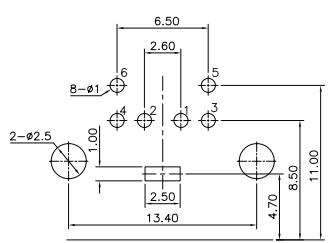
ITEM	DESCRIPTION	MATERIAL	PLATING/COLOR
1	body	PBT (UL94V-0)	black
2	cover	PBT (UL94V-0)	black
3	earth terminal	brass	tin
4	terminals	phosphor bronze	silver
5	shield	SPCC	tin



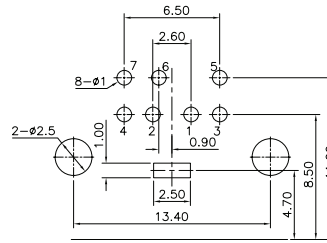
**MD-60SM**

**MD-70SM**

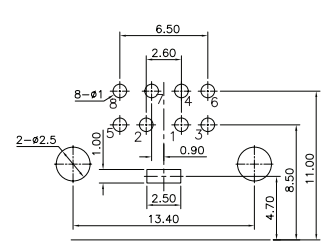
**MD-80SM**



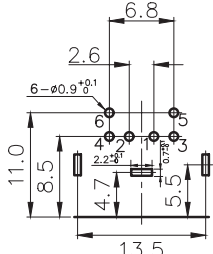
Recommended PCB Layout  
 Top View  
 (Date Codes prior to 03/03/2022)



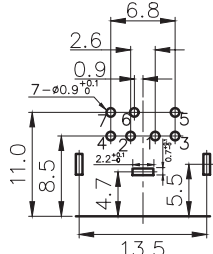
Recommended PCB Layout  
 Top View  
 (Date Codes prior to 03/03/2022)



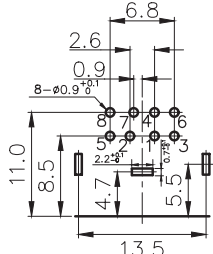
Recommended PCB Layout  
 Top View  
 (Date Codes prior to 03/03/2022)



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



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

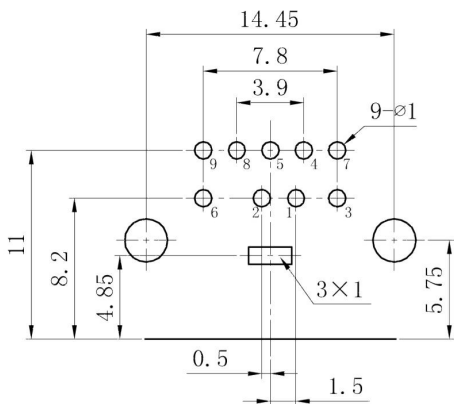
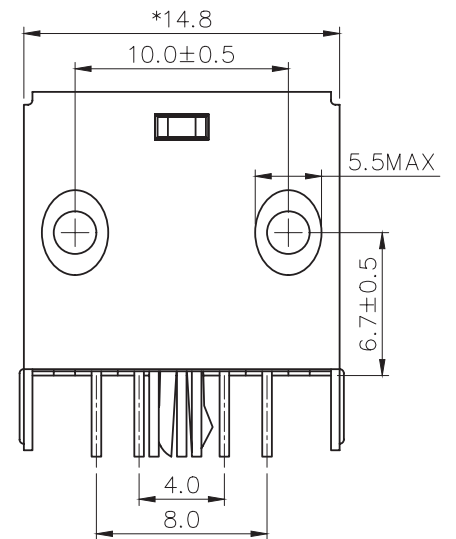
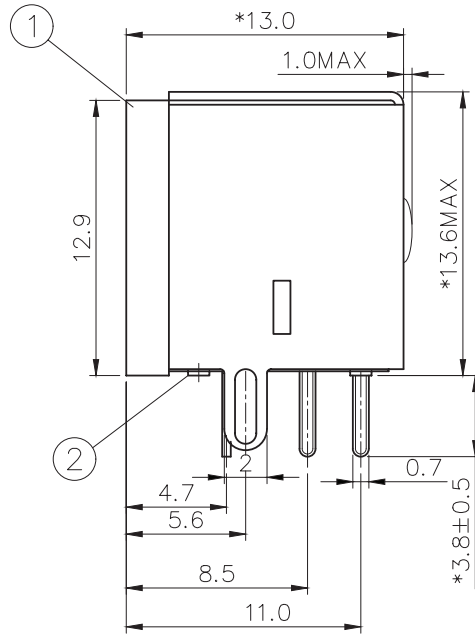
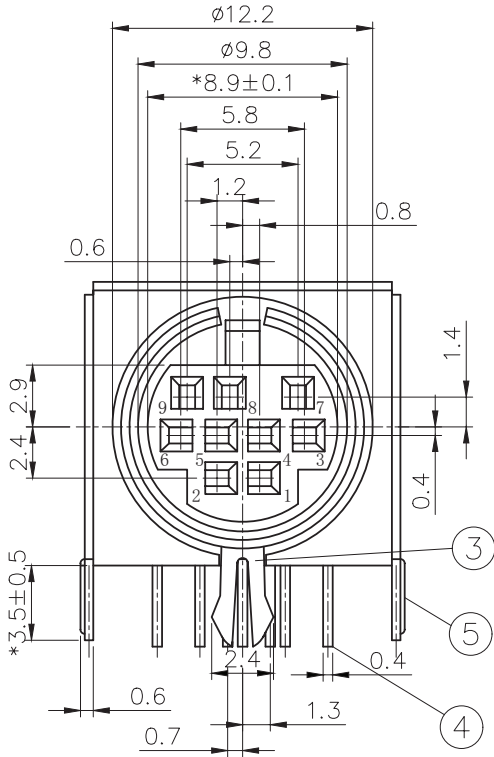


Recommended PCB Layout  
 Top View  
 (Date Codes after 03/03/2022)

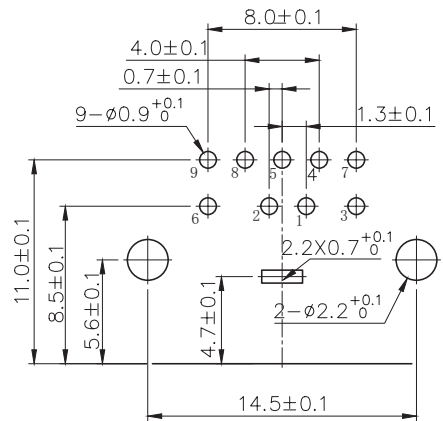
## MECHANICAL DRAWING (MD-90SM)

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

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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

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

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