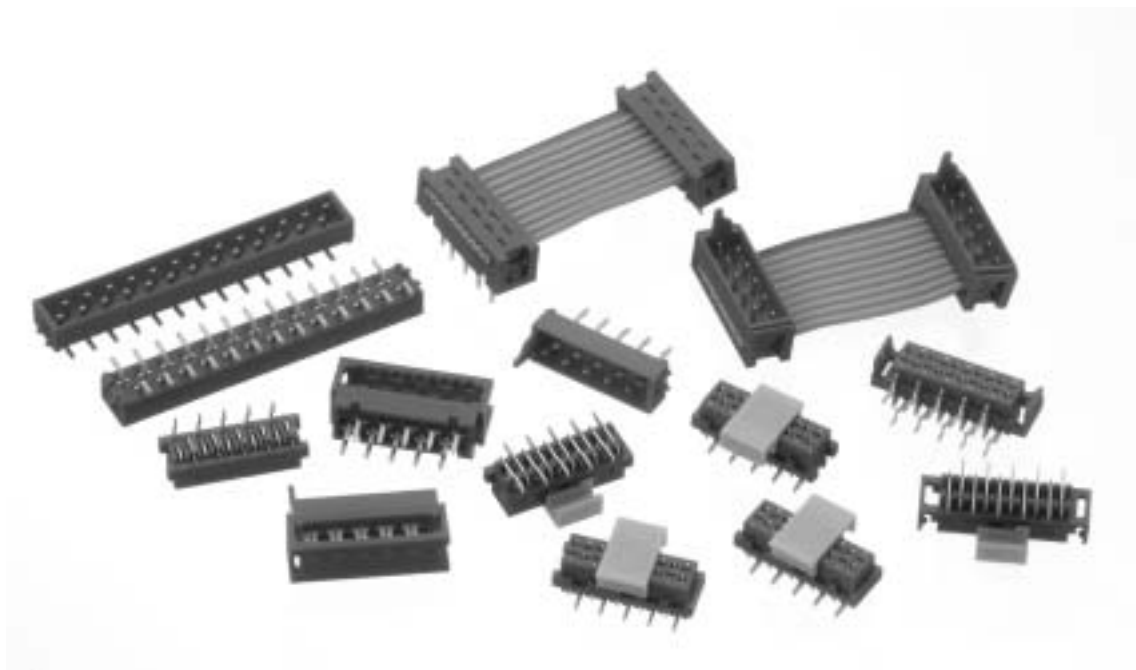


## MiniModule Connector WR-MM





## MiniModule Connector WR-MM

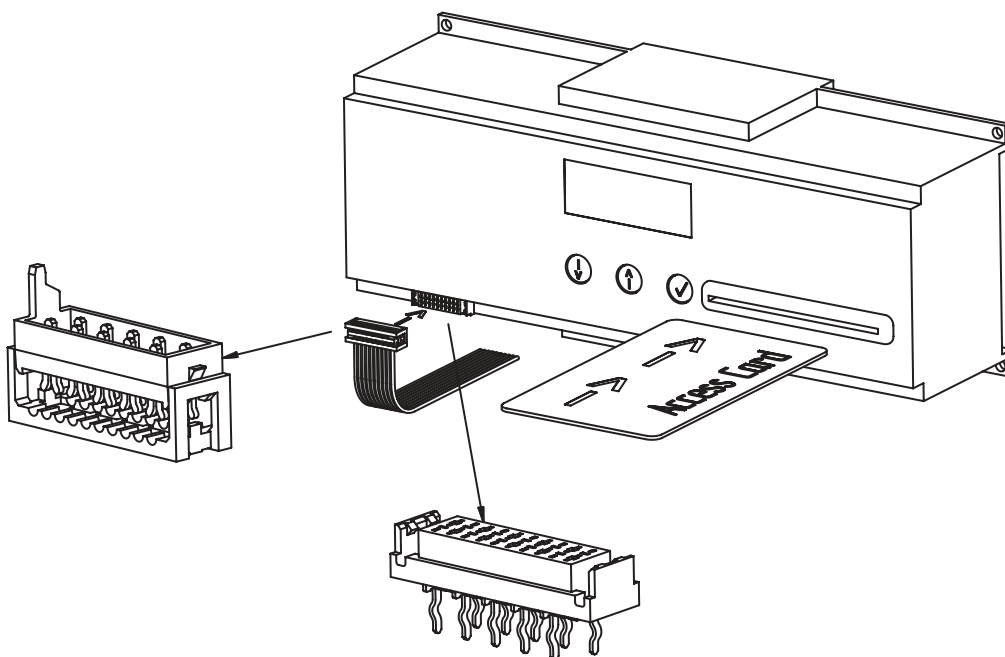
Compact and low profile IDC connectors for ribbon cable 1.27mm pitch. Contact number from 4 to 26 pin. Cable type, through hole, SMD or PCB type.

### Features:














- Pseudo 1.27mm pitch system
- Tin plated contact design
- Contact spring (female) on board
- Compact and low profile IDC connectors
- Additional positioning spring member

### Benefits:

- Space savings
- Lead free & RoHS compatible
- No bending of contact
- More compact than standard box header and other flat cable connectors
- Fretting corrosion proof  
Thanks to the spring, movement caused by vibrations/thermal expansion between male & female are absorbed



## MiniModule Connector WR-MM

	Female SMT Connector with Latch and with Polarization	04-5
	Female SMT Connector with Polarization	04-6
	Female Connector with Latch & Without Polarization	04-7
	Female Connector without Latch & without Polarization	04-8
	Female Angled Connector with Latch and with Polarization	04-9
	Female Angled Connector with Polarization & without Latch	04-10
	Female Angled Connector without Latch & without Polarization	04-11
	Male SMT Connector without Latch and without Polarization	04-12
	Male Connector without Latch & without Polarization	04-13
	Male IDC Connector	04-14
	Transition Connector	04-15
	IDC Press	04-16
	Design Kit	04-17

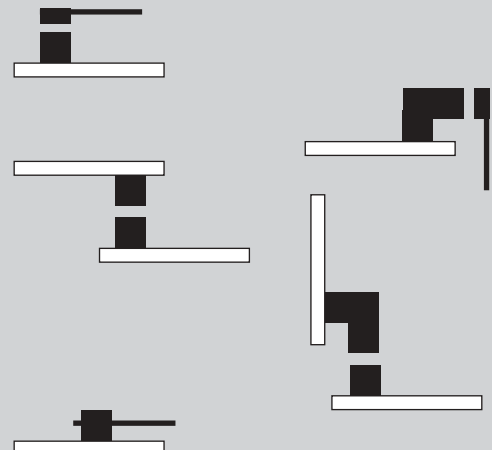
NEW

NEW

04

### Multiple applications possible

- Wire to board connection with the cable parallel to PCB
- Wire to board connection with the cable perpendicular to PCB
- Board to board connection with 2 parallel board (sandwich configuration)
- Board to board connection with 2 PCB (mother/daughter card)
- Permanent connection of ribbon cable to PCB using DIP/transition connector

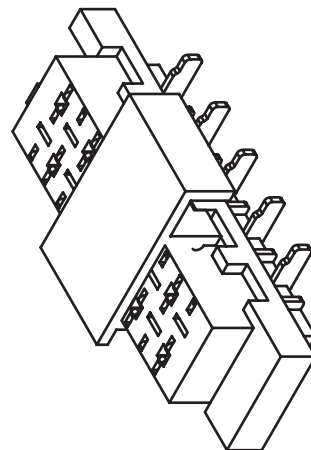




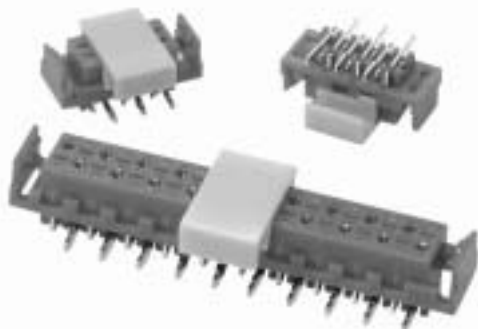
## MiniModule WR-MM

PCB/Cable type	Gender	Construction	Type	Latch	Polarization	Order Code	Page
PCB	Female	SMT	Straight	With latch	With polarization	<b>6903 6729 xx 76</b>	04-5
				Without latch	With polarization	<b>6903 6728 xx 76</b>	04-6
		TH		With latch	Without polarization	<b>6903 6719 xx 72</b>	04-7
				Without latch	Without polarization	<b>6903 6718 xx 72</b>	04-8
		TH	Angled	With latch	With polarization	<b>6903 6819 xx 72</b>	04-9
				Without latch	With polarization	<b>6903 6817 xx 72</b>	04-10
	SMT	Straight		Without latch	Without polarization	<b>6903 5728 xx 76</b>	04-12
				Without latch	Without polarization	<b>6903 5710 XX 72</b>	04-13
	Male	TH	Straight	Without latch	Without polarization	<b>6903 5728 xx 76</b>	04-12
				Without latch	Without polarization	<b>6903 5710 XX 72</b>	04-13
Cable	Male IDC					<b>6901 5700 XX 72</b>	04-14
	Transition					<b>6902 0710 XX 72</b>	04-15
Tool	IDC Press					<b>600 690 282 801</b>	04-16
	Design Kit					<b>690 001</b>	04-17

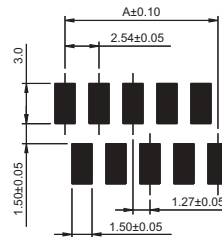
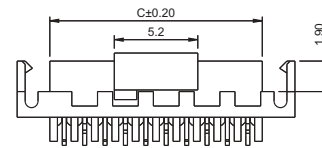
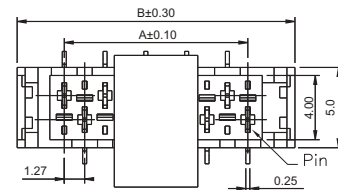
NEW  
NEW



# Female SMT Connector with Latch and with Polarization WR-MM



HIGH TEMPERATURE



PCB LAYOUT - COMPONENT VIEW



## MATERIAL

- Insulator: PA6T
  - Flamability rating: UL94-V0
  - Colour: Red
  - Contact material: Phosphor bronze
  - Contact type: Stamped
  - Contact plating: Matt tin over nickel
  - Quality class: 25 Mating cycles
  - Pitch: 2.54 mm per row
- 1.27 mm ribbon cable

## ELECTRICAL

- Current rating: 1.5 A max per pin (pcb)  
1.0A max per pin (cable)
- Working voltage: 100 Vac
- Insulation resistance: >1000 MOhm
- Dielectric withstanding voltage: 500 Vac/mn
- Contact resistance: 10 mOhm max

## SOLDERING

- Solder temperature: JEDEC lead free reflow soldering

## ENVIRONMENTAL

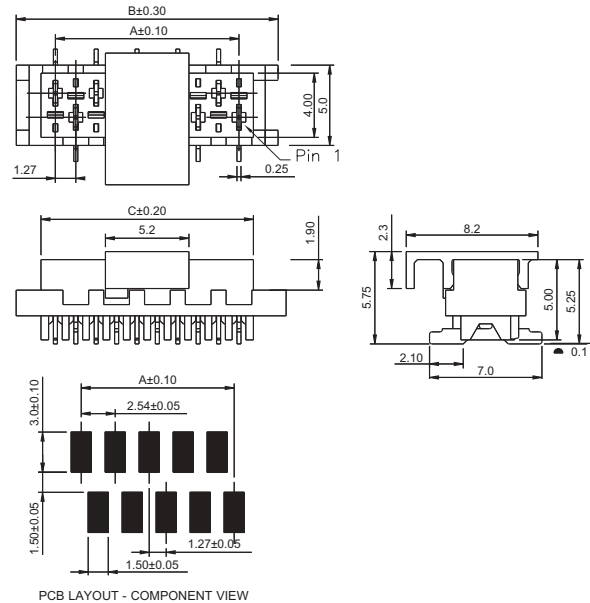
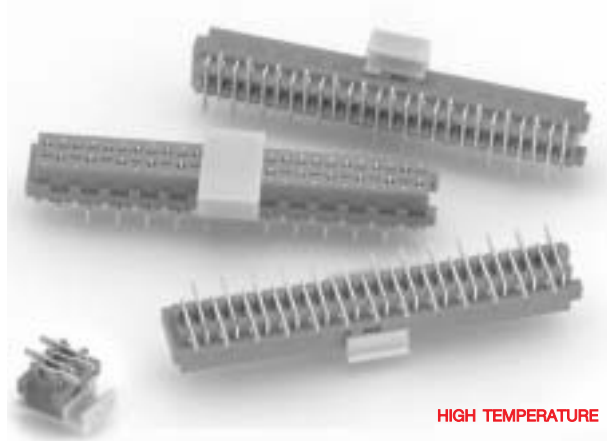
- Operating temperature: -40 °C up to 105 °C
- Compliance: Lead free and RoHS

## PACKAGING

- Tape & Reel

Order Code	Pins	Polarization	Latch Type	A (mm)	B (mm)	C (mm)
6903 6729 04 76	4	With Polarization	With Latch	3.81	9.68	5.61
6903 6729 06 76	6			6.35	12.22	8.15
6903 6729 08 76	8			8.89	14.76	10.69
6903 6729 10 76	10			11.43	17.30	13.23
6903 6729 12 76	12			13.97	19.84	15.77
6903 6729 14 76	14			16.51	22.38	18.31
6903 6729 16 76	16			19.05	24.92	20.85
6903 6729 18 76	18			21.59	27.46	23.39
6903 6729 20 76	20			24.13	30.00	25.93
6903 6729 22 76	22			26.67	32.54	28.47
6903 6729 24 76	24			29.21	35.08	31.01
6903 6729 26 76	26			31.75	37.62	33.55

## Female SMT Connector with Polarization WR-MM



### MATERIAL

- Insulator: PA6T
  - Flamability rating: UL94-V0
  - Colour: Red
  - Contact material: Phosphor bronze
  - Contact type: Stamped
  - Contact plating: Matt tin over nickel
  - Quality class: 25 Mating cycles
  - Pitch: 2.54 mm per row
- 1.27 mm ribbon cable

### ENVIRONMENTAL

- Operating temperature:  $-40\text{ }^{\circ}\text{C}$  up to  $105\text{ }^{\circ}\text{C}$
- Compliance: Lead free and RoHS

### ELECTRICAL

- Current rating: 1.5 A max per pin (pcb)  
1.0A max per pin (cable)
- Working voltage: 100 Vac
- Insulation resistance:  $>1000\text{ MOhm}$
- Dielectric withstanding voltage: 500 Vac/mn
- Contact resistance: 10 mOhm max

### SOLDERING

- Solder temperature: JEDEC lead free reflow soldering

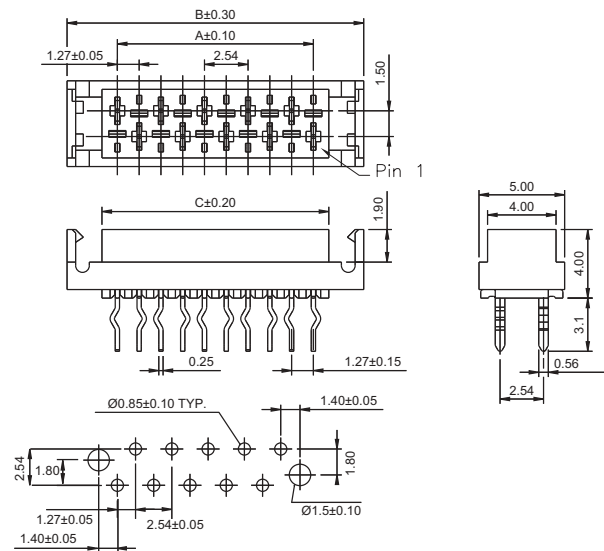
### PACKAGING

- Tape & Reel

Order Code	Pins	Polarization	Latch Type	A (mm)	B (mm)	C (mm)
6903 6728 04 76	4	With Polarization	Without Latch	3.81	7.08	5.61
6903 6728 06 76	6			6.35	9.62	8.15
6903 6728 08 76	8			8.89	12.16	10.69
6903 6728 10 76	10			11.43	14.703	13.23
6903 6728 12 76	12			13.97	17.24	15.77
6903 6728 14 76	14			16.51	19.78	18.31
6903 6728 16 76	16			19.05	22.32	20.85
6903 6728 18 76	18			21.59	24.86	23.39
6903 6728 20 76	20			24.13	27.40	25.93
6903 6728 22 76	22			26.67	29.94	28.47
6903 6728 24 76	24			29.21	32.48	31.01
6903 6728 26 76	26			31.75	35.02	33.55



# Female Connector with Latch & without Polarization WR-MM



PCB LAYOUT - COMPONENT VIEW



## MATERIAL

- Insulator: PBT
  - Flamability rating: UL94-V0
  - Colour: Red
  - Contact material: Phosphor bronze
  - Contact type: Stamped
  - Contact plating: Matt tin over nickel
  - Quality class: 25 Mating cycles
  - Pitch: 2.54 mm per row
- 1.27 mm ribbon cable

## ENVIRONMENTAL

- Operating temperature: -40 °C up to 105 °C
- Compliance: Lead free and RoHS

## ELECTRICAL

- Current rating: 1.5 A max per pin (pcb)  
1.0A max per pin (cable)
- Working voltage: 100 Vac
- Insulation resistance: >1000 MOhm
- Dielectric withstanding voltage: 500 Vac/mn
- Contact resistance: 10 mOhm max

## SOLDERING

- Solder temperature: JEDEC lead free wave soldering

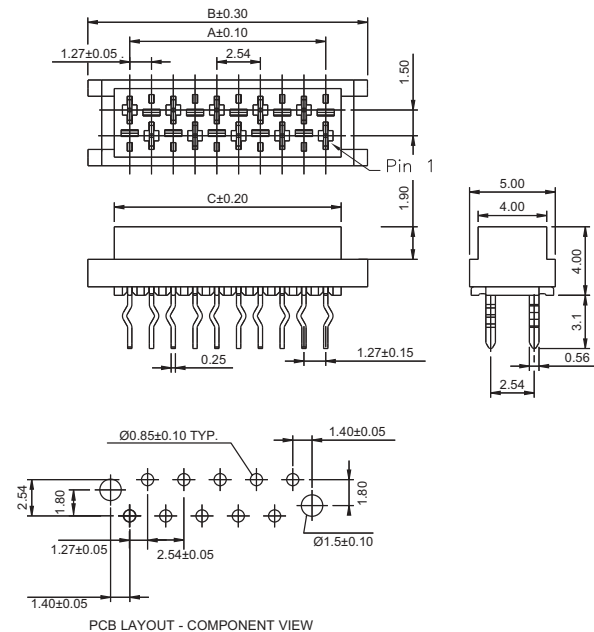
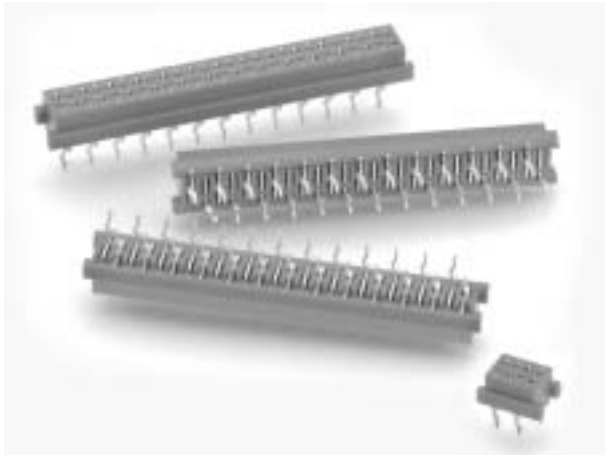
## PACKAGING

- Tube

Order Code	Pins	Polarization	Latch Type	A (mm)	B (mm)	C (mm)
6903 6719 04 72	4	Without Polarization	With Latch	3.81	9.68	5.61
6903 6719 06 72	6			6.35	12.22	8.15
6903 6719 08 72	8			8.89	14.76	10.69
6903 6719 10 72	10			11.43	17.30	13.23
6903 6719 12 72	12			13.97	19.84	15.77
6903 6719 14 72	14			16.51	22.38	18.31
6903 6719 16 72	16			19.05	24.92	20.85
6903 6719 18 72	18			21.59	27.46	23.39
6903 6719 20 72	20			24.13	30.00	25.93
6903 6719 22 72	22			26.67	32.54	28.47
6903 6719 24 72	24			29.21	35.08	31.01
6903 6719 26 72	26			31.75	37.62	33.55



## Female Connector without Latch and without Polarization WR-MM



### MATERIAL

- Insulator: PBT
  - Flamability rating: UL94-V0
  - Colour: Red
  - Contact material: Phosphor bronze
  - Contact type: Stamped
  - Contact plating: Matt tin over nickel
  - Quality class: 25 Mating cycles
  - Pitch: 2.54 mm per row
- 1.27 mm ribbon cable

### ENVIRONMENTAL

- Operating temperature: -40 °C up to 105 °C
- Compliance: Lead free and RoHS

### ELECTRICAL

- Current rating: 1.5 A max per pin (pcb)  
1.0A max per pin (cable)
- Working voltage: 100 Vac
- Insulation resistance: >1000 MOhm
- Dielectric withstanding voltage: 500 Vac/mn
- Contact resistance: 10 mOhm max

### SOLDERING

- Solder temperature: JEDEC lead free wave soldering

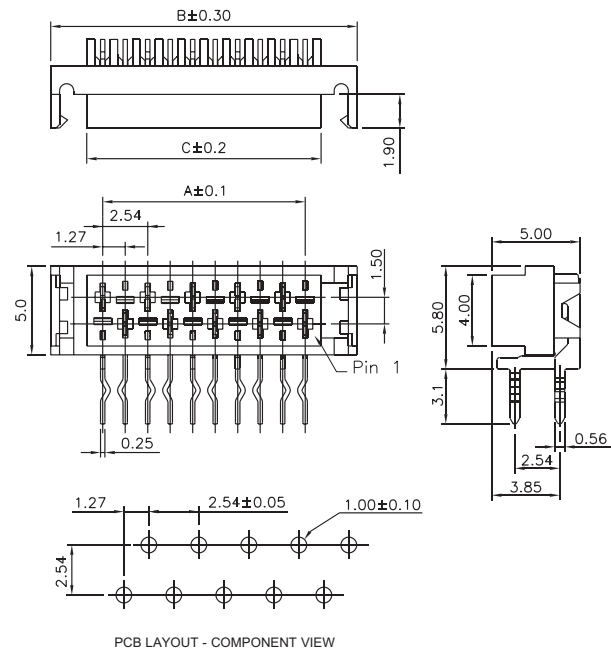
### PACKAGING

- Tube

Order Code	Pins	Polarization	Latch Type	A (mm)	B (mm)	C (mm)
6903 6718 04 72	4	Without Polarization	Without Latch	3.81	7.08	5.61
6903 6718 06 72	6			6.35	9.62	8.15
6903 6718 08 72	8			8.89	12.16	10.69
6903 6718 10 72	10			11.43	14.703	13.23
6903 6718 12 72	12			13.97	17.24	15.77
6903 6718 14 72	14			16.51	19.78	18.31
6903 6718 16 72	16			19.05	22.32	20.85
6903 6718 18 72	18			21.59	24.86	23.39
6903 6718 20 72	20			24.13	27.40	25.93
6903 6718 22 72	22			26.67	29.94	28.47
6903 6718 24 72	24			29.21	32.48	31.01
6903 6718 26 72	26			31.75	35.02	33.55



## Female Angled Connector with Latch and with Polarization WR-MM



### MATERIAL

- Insulator: PBT
  - Flamability rating: UL94-V0
  - Colour: Red
  - Contact material: Phosphor bronze
  - Contact type: Stamped
  - Contact plating: Matt tin over nickel
  - Quality class: 25 Mating cycles
  - Pitch: 2.54 mm per row
- 1.27 mm ribbon cable

### ENVIRONMENTAL

- Operating temperature: -40 °C up to 105 °C
- Compliance: Lead free and RoHS

### ELECTRICAL

- Current rating: 1.5 A max per pin (pcb)  
1.0A max per pin (cable)
- Working voltage: 100 Vac
- Insulation resistance: >1000 MOhm
- Dielectric withstanding voltage: 500 Vac/mn
- Contact resistance: 10 mOhm max

### SOLDERING

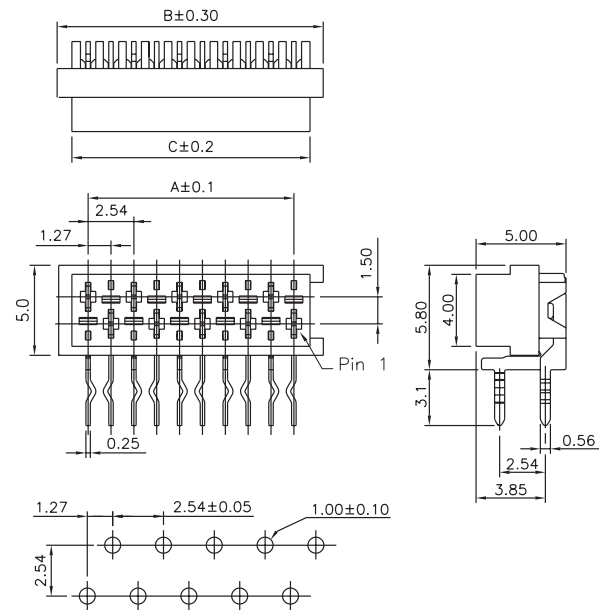
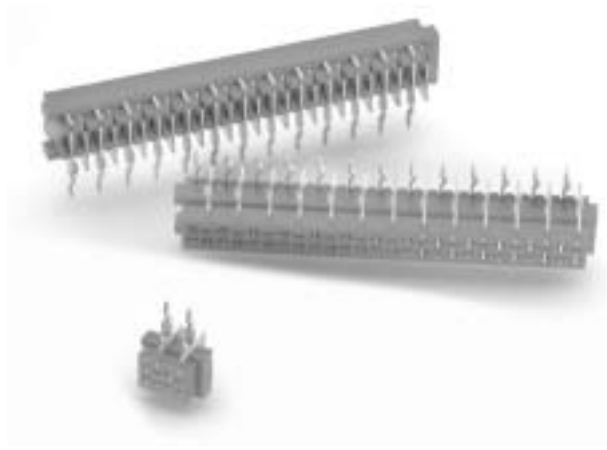
- Solder temperature: JEDEC lead free wave soldering

### PACKAGING

- Tube

Order Code	Pins	Polarization	Latch Type	A (mm)	B (mm)	C (mm)
6903 6819 04 72	4	With Polarization	With Latch	3.81	9.68	5.61
6903 6819 06 72	6			6.35	12.22	8.15
6903 6819 08 72	8			8.89	14.76	10.69
6903 6819 10 72	10			11.43	17.30	13.23
6903 6819 12 72	12			13.97	19.84	15.77
6903 6819 14 72	14			16.51	22.38	18.31
6903 6819 16 72	16			19.05	24.92	20.85
6903 6819 18 72	18			21.59	27.46	23.39
6903 6819 20 72	20			24.13	30.00	25.93
6903 6819 22 72	22			26.67	32.54	28.47
6903 6819 24 72	24			29.21	35.08	31.01
6903 6819 26 72	26			31.75	37.62	33.55

# Female Angled Connector with Polarization without Latch WR-MM



04



## MATERIAL

- Insulator: PBT
  - Flamability rating: UL94-V0
  - Colour: Red
  - Contact material: Phosphor bronze
  - Contact type: Stamped
  - Contact plating: Matt tin over nickel
  - Quality class: 25 Mating cycles
  - Pitch: 2.54 mm per row
- 1.27 mm ribbon cable

## ENVIRONMENTAL

- Operating temperature:  $-40\text{ }^{\circ}\text{C}$  up to  $105\text{ }^{\circ}\text{C}$
- Compliance: Lead free and RoHS

## ELECTRICAL

- Current rating: 1.5 A max per pin (pcb)  
1.0A max per pin (cable)
- Working voltage: 100 Vac
- Insulation resistance:  $>1000\text{ MOhm}$
- Dielectric withstanding voltage: 500 Vac/mn
- Contact resistance: 10 mOhm max

## SOLDERING

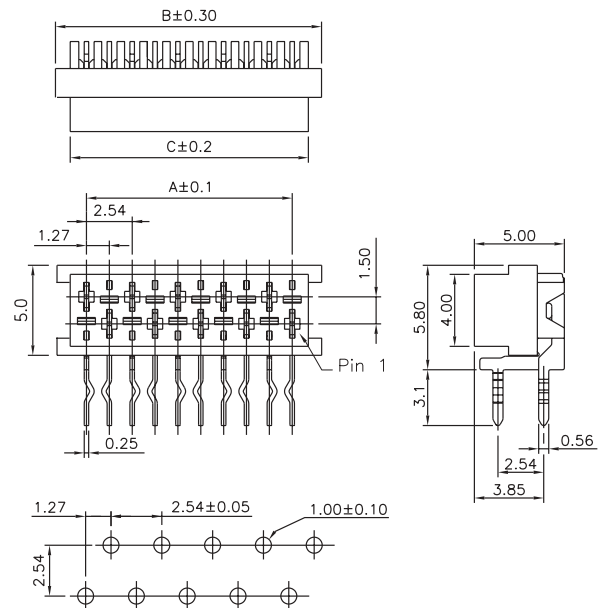
- Solder temperature: JEDEC lead free wave soldering

## PACKAGING

- Tube

Order Code	Pins	Polarization	Latch Type	A (mm)	B (mm)	C (mm)
6903 6817 04 72	4	With Polarization	Without Latch	3.81	7.08	5.61
6903 6817 06 72	6			6.35	9.62	8.15
6903 6817 08 72	8			8.89	12.16	10.69
6903 6817 10 72	10			11.43	14.703	13.23
6903 6817 12 72	12			13.97	17.24	15.77
6903 6817 14 72	14			16.51	19.78	18.31
6903 6817 16 72	16			19.05	22.32	20.85
6903 6817 18 72	18			21.59	24.86	23.39
6903 6817 20 72	20			24.13	27.40	25.93
6903 6817 22 72	22			26.67	29.94	28.47
6903 6817 24 72	24			29.21	32.48	31.01
6903 6817 26 72	26			31.75	35.02	33.55

# Female Angled Connector without Latch and without Polarization WR-MM



04



## MATERIAL

- Insulator: PBT
  - Flamability rating: UL94-V0
  - Colour: Red
  - Contact material: Phosphor bronze
  - Contact type: Stamped
  - Contact plating: Matt tin over nickel
  - Quality class: 25 Mating cycles
  - Pitch: 2.54 mm per row
- 1.27 mm ribbon cable

## ENVIRONMENTAL

- Operating temperature:  $-40\text{ }^{\circ}\text{C}$  up to  $105\text{ }^{\circ}\text{C}$
- Compliance: Lead free and RoHS

## ELECTRICAL

- Current rating: 1.5 A max per pin (pcb)  
1.0A max per pin (cable)
- Working voltage: 100 VAc
- Insulation resistance:  $>1000\text{ MOhm}$
- Dielectric withstanding voltage: 500 Vac/mn
- Contact resistance: 10 mOhm max

## SOLDERING

- Solder temperature: JEDEC lead free wave soldering

## PACKAGING

- Tube

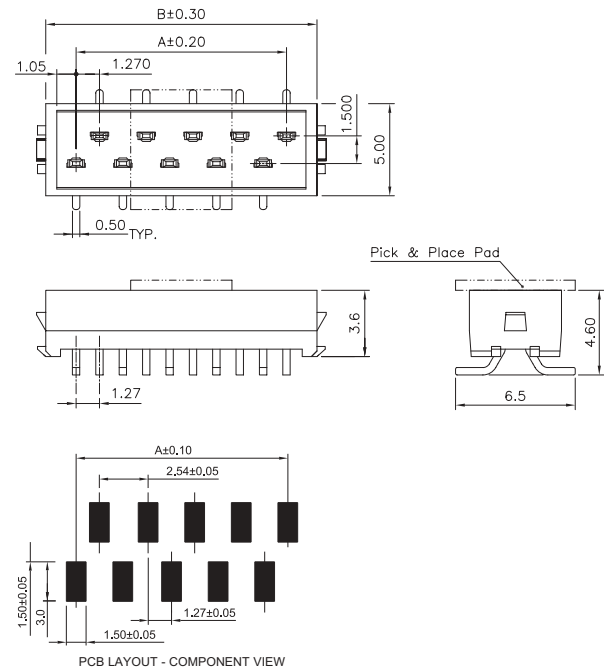
Order Code	Pins	Polarization	Latch Type	A (mm)	B (mm)	C (mm)
6903 6818 04 72	4	Without Polarization	Without Latch	3.81	7.08	5.61
6903 6818 06 72	6			6.35	9.62	8.15
6903 6818 08 72	8			8.89	12.16	10.69
6903 6818 10 72	10			11.43	14.703	13.23
6903 6818 12 72	12			13.97	17.24	15.77
6903 6818 14 72	14			16.51	19.78	18.31
6903 6818 16 72	16			19.05	22.32	20.85
6903 6818 18 72	18			21.59	24.86	23.39
6903 6818 20 72	20			24.13	27.40	25.93
6903 6818 22 72	22			26.67	29.94	28.47
6903 6818 24 72	24			29.21	32.48	31.01
6903 6818 26 72	26			31.75	35.02	33.55



# Male SMT Connector without Latch and without Polarization WR-MM



HIGH TEMPERATURE



## MATERIAL

- Insulator: PA6T
  - Flamability rating: UL94-V0
  - Colour: Red
  - Contact material: Phosphor bronze
  - Contact type: Stamped
  - Contact plating: Matt tin over nickel
  - Quality class: 25 Mating cycles
  - Pitch: 2.54 mm per row
- 1.27 mm ribbon cable

## ENVIRONMENTAL

- Operating temperature: -40 °C up to 105 °C
- Compliance: Lead free and RoHS

## ELECTRICAL

- Current rating: 1.5 A max per pin (pcb)  
1.0A max per pin (cable)
- Working voltage: 100 VAc
- Insulation resistance: >1000 MOhm
- Dielectric withstanding voltage: 500 Vac/mn
- Contact resistance: 10 mOhm max

## SOLDERING

- Solder temperature: JEDEC lead free reflow soldering

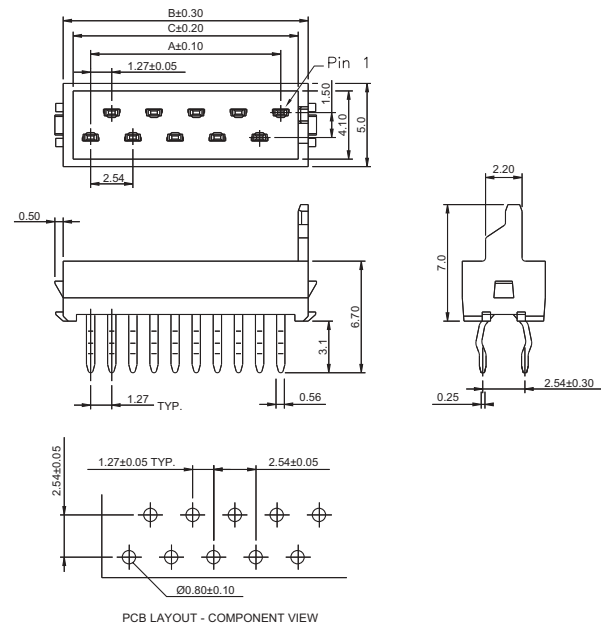
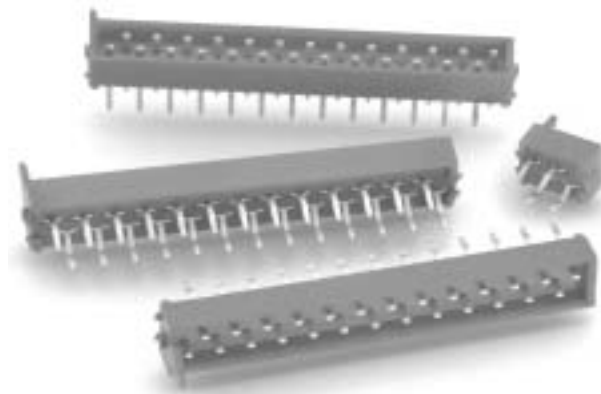
## PACKAGING

- Tape & Reel

Order Code	Pins	Polarization	Latch Type	A (mm)	B (mm)
6903 5728 04 76	4	Without Polarization	Without Latch	3.81	7.11
6903 5728 06 76	6			6.35	9.65
6903 5728 08 76	8			8.89	12.19
6903 5728 10 76	10			11.43	14.73
6903 5728 12 76	12			13.97	17.27
6903 5728 14 76	14			16.51	19.81
6903 5728 16 76	16			19.05	22.35
6903 5728 18 76	18			21.59	24.89
6903 5728 20 76	20			24.13	27.43
6903 5728 22 76	22			26.67	29.97
6903 5728 24 76	24			29.21	32.51
6903 5728 26 76	26			31.75	35.05



## Male Connector with Polarization WR-MM



### MATERIAL

- Insulator: PBT
  - Flamability rating: UL94-V0
  - Colour: Red
  - Contact material: Phosphor bronze
  - Contact type: Stamped
  - Contact plating: Matt tin over nickel
  - Quality class: 25 Mating cycles
  - Pitch: 2.54 mm per row
- 1.27 mm ribbon cable

### ENVIRONMENTAL

- Operating temperature: -40 °C up to 105 °C
- Compliance: Lead free and RoHS

### ELECTRICAL

- Current rating: 1.5 A max per pin (pcb)  
1.0A max per pin (cable)
- Working voltage: 100 VAc
- Insulation resistance: >1000 MOhm
- Dielectric withstanding voltage: 500 Vac/mn
- Contact resistance: 10 mOhm max

### SOLDERING

- Solder temperature: JEDEC lead free wave soldering

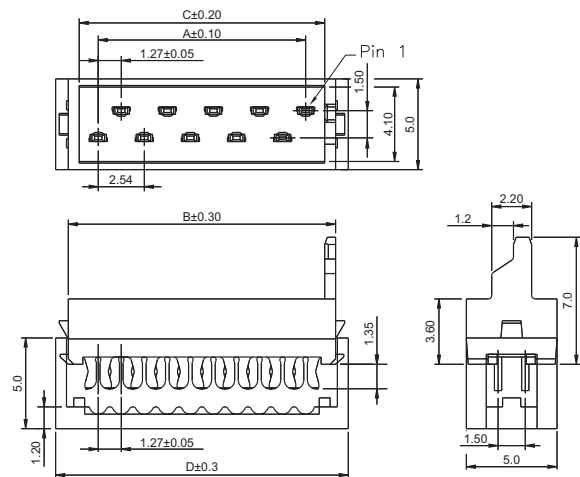
### PACKAGING

- Tube

Order Code	Pins	A (mm)	B (mm)	C (mm)
6903 5710 04 72	4	3.81	7.11	5.91
6903 5710 06 72	6	6.35	9.65	8.45
6903 5710 08 72	8	8.89	12.19	10.99
6903 5710 10 72	10	11.43	14.73	13.53
6903 5710 12 72	12	13.97	17.27	16.07
6903 5710 14 72	14	16.51	19.81	18.61
6903 5710 16 72	16	19.05	22.35	21.15
6903 5710 18 72	18	21.59	24.89	23.69
6903 5710 20 72	20	24.13	27.43	26.23
6903 5710 22 72	22	26.67	29.97	28.77
6903 5710 24 72	24	29.21	32.51	31.31
6903 5710 26 72	26	31.75	35.05	33.85



## Male IDC Connector WR-MM



### MATERIAL

- Insulator: PBT
- Flamability rating: UL94-V0
- Colour: Red
- Contact material: Phosphor bronze
- Contact type: Stamped
- Contact plating: Matt tin over nickel
- Quality class: 25 Mating cycles
- Pitch: 2.54 mm per row  
1.27 mm ribbon cable

### ENVIRONMENTAL

- Operating temperature:  $-40\text{ }^{\circ}\text{C}$  up to  $105\text{ }^{\circ}\text{C}$
- Compliance: Lead free and RoHS

### ELECTRICAL

- Current rating: 1.0A max per pin (cable)
- Working voltage: 100 VAC
- Insulation resistance:  $>1000\text{ MOhm}$
- Dielectric withstanding voltage: 500 Vac/mn
- Contact resistance: 10 mOhm max

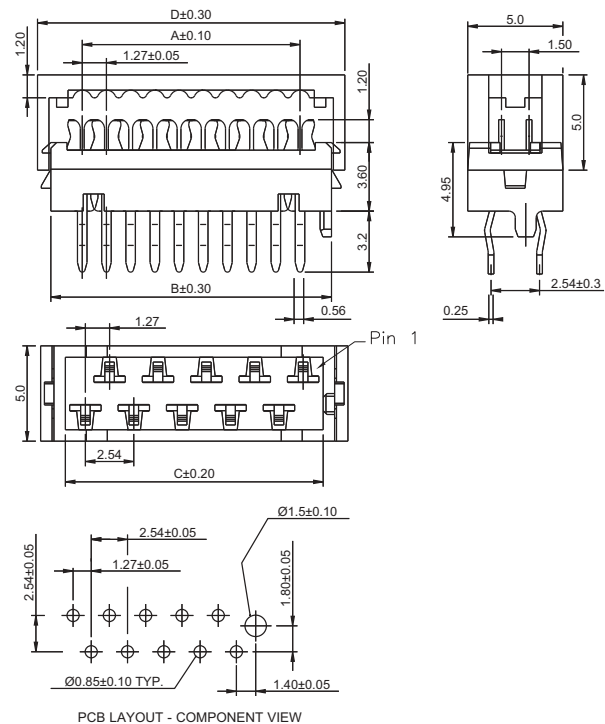
### PACKAGING

- Tube

For cable see chapter 06

Order Code	Pins	A (mm)	B (mm)	C (mm)	D (mm)
6901 5700 04 72	4	3.81	7.11	5.91	8.51
6901 5700 06 72	6	6.35	9.65	8.45	11.05
6901 5700 08 72	8	8.89	12.19	10.99	13.59
6901 5700 10 72	10	11.43	14.73	13.53	16.13
6901 5700 12 72	12	13.97	17.27	16.07	18.67
6901 5700 14 72	14	16.51	19.81	18.61	21.21
6901 5700 16 72	16	19.05	22.35	21.15	23.75
6901 5700 18 72	18	21.59	24.89	23.69	26.29
6901 5700 20 72	20	24.13	27.43	26.23	28.83
6901 5700 22 72	22	26.67	29.97	28.77	31.37
6901 5700 24 72	24	29.21	32.51	31.31	33.91
6901 5700 26 72	26	31.75	35.05	33.85	36.45

## Transition Connector WR-MM



### MATERIAL

- Insulator: PBT
- Flamability rating: UL94-V0
- Colour: Red
- Contact material: Phosphor bronze
- Contact type: Stamped
- Contact plating: Matt tin over nickel
- Quality class: 25 Mating cycles
- Pitch: 2.54 mm per row  
1.27 mm ribbon cable

### ENVIRONMENTAL

- Operating temperature: -40 °C up to 105 °C
- Compliance: Lead free and RoHS

### ELECTRICAL

- Current rating: 1.0A max per pin (cable)
- Working voltage: 100 VAC
- Insulation resistance: >1000 MOhm
- Dielectric withstanding voltage: 500 Vac/mn
- Contact resistance: 10 mOhm max

### PACKAGING

- Tube

For cable see chapter 06

Order Code	Pins	A (mm)	B (mm)	C (mm)	D (mm)
6902 0710 04 72	4	3.81	7.11	5.91	8.51
6902 0710 06 72	6	6.35	9.65	8.45	11.05
6902 0710 08 72	8	8.89	12.19	10.99	13.59
6902 0710 10 72	10	11.43	14.73	13.53	16.13
6902 0710 12 72	12	13.97	17.27	16.07	18.67
6902 0710 14 72	14	16.51	19.81	18.61	21.21
6902 0710 16 72	16	19.05	22.35	21.15	23.75
6902 0710 18 72	18	21.59	24.89	23.69	26.29
6902 0710 20 72	20	24.13	27.43	26.23	28.83
6902 0710 22 72	22	26.67	29.97	28.77	31.37
6902 0710 24 72	24	29.21	32.51	31.31	33.91
6902 0710 26 72	26	31.75	35.05	33.85	36.45

**NEW**

## IDC Press WR-MM

**04**

Valid only for WR-MM series. For more details ask for our user's manual

Order Code	Description
600 690 282 801	WR-MM IDC Press



NEW

## Design Kit WR-MM



04



**Order Code 690 001**

Design Kit WR-MM

All the parts of the assortment are detailed below

P/N in the Kit	Pins	Description
6903 6729 xx 76	4 to 26	Female SMT Connector With Latch & Polarization
6903 6728 xx 76	4 to 26	Female SMT Connector With Polarization
6903 6719 xx 72	4 to 26	Female Connector With Latch & Without Polarization
6903 6718 xx 72	4 to 26	Female Connector Without Latch & Polarization
6903 6819 xx 72	4 to 26	Female Angled Connector With Latch & Polarization
6903 6817 xx 72	4 to 26	Female Angled Connector Without Latch & With Polarization
6903 6818 xx 72	4 to 26	Female Angled Connector Without Latch & Polarization
6903 5728 xx 76	4 to 26	Male SMT Connector Without Latch & Polarization
6903 5710 xx 72	4 to 26	Male Connector Without Latch & Polarization
6901 5700 xx 72	4 to 26	Male IDC Connector
6902 0710 xx 72	4 to 26	Transition Connector
639 1xx 155 21	4 to 26	Flat Cable



## Notes: