

# Technical Data Sheet

## Battery Mating Connectors RRC-MC20-Series



### Battery Mating Connectors

#### Features:

- Mating connectors for standard smart batteries from RRC (e.g. RRC2020, RRC2024, RRC2040, RRC2040-2, RRC2054, RRC2057, ...)
- 10A max. charge or discharge current to battery
- 5-pin male connectors
- 5mm pitch
- RoHS compatible

#### Applications:

- Mating connectors for RRC's smart batteries used in medical and industrial applications

### Specification

<b>Ratings</b>	
Current	10A max. / pin
Voltage	125V AC / 1min
<b>Materials</b>	
Housing	Thermoplastic High Temperature, UL 94V-0, black
Contacts	Copper Alloy
Plating	80µm Nickel on contact area 100µm Matte-Tin on solder tails
<b>Environmental Condition</b>	
Operating Temperature	-55°C to +105°C

<b>Electrical Requirements</b>	
Contact Resistance	30mOhm max.
Insulation Resistance	100MOhm min. at 500VDC/2min
Dielectric withstand	500V
<b>Mechanical Requirements</b>	
Contact Retention Force	500g min. / pin
<b>Physical Requirements</b>	
Solder Temperature	245°C ± 5°C
Immersion Period	3 ± 0.5sec
<b>Regulatory Approvals</b>	
RoHS	

<b>RRC-MC20-180-10</b>	
RRC part number	210518
PCB mounting	180°
<b>Mechanical Requirements</b>	
Dimensions (LxWxH)	25mm x 11.70mm x 9.80mm
Weight	Typical 3g
<b>Packaging</b>	
24 connectors per tube 110 tubes per carton	

<b>RRC-MC20-90-10</b>	
RRC part number	210519
PCB mounting	90°
<b>Mechanical Requirements</b>	
Dimensions (LxWxH)	27mm x 13.70mm x 9.90mm
Weight	Typical 3g
<b>Packaging</b>	
22 connectors per tube 77 tubes per carton	

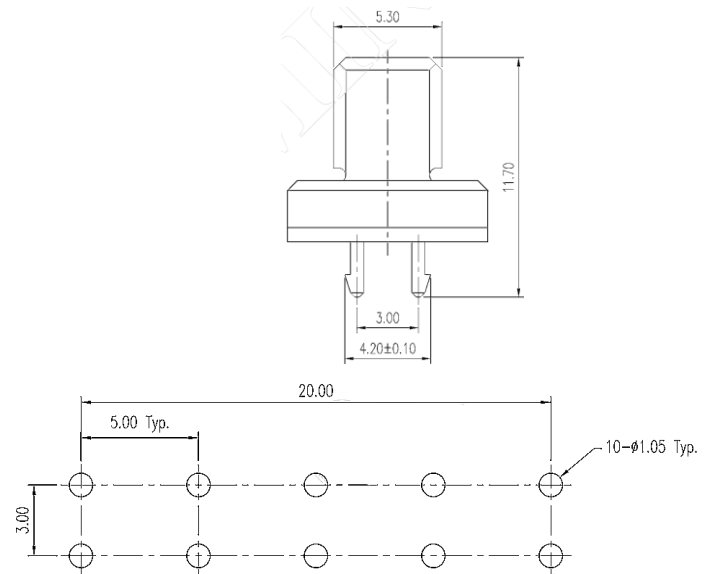
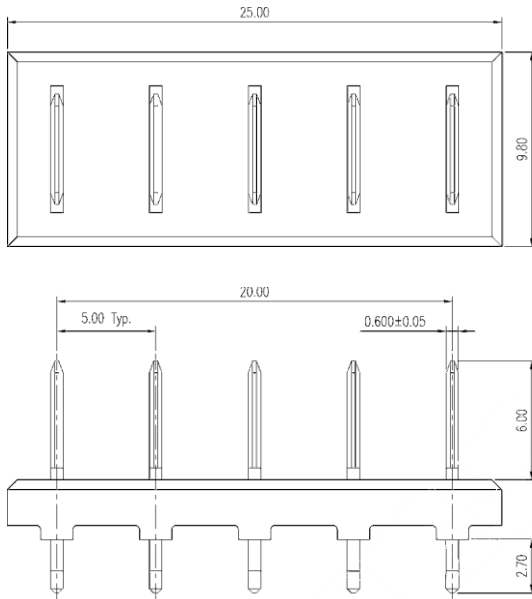
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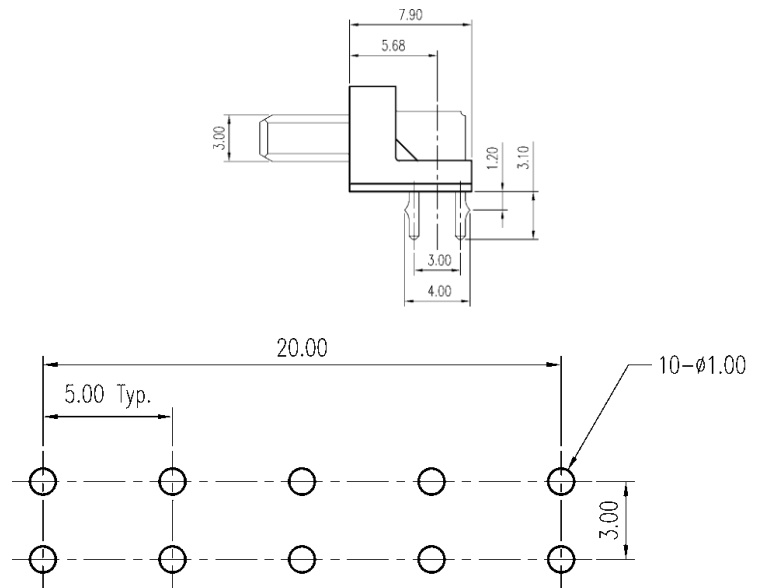
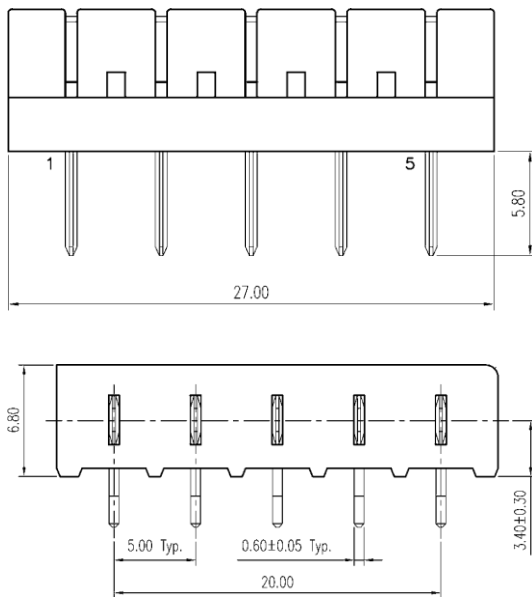
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### RRC-MC20-180-10



### RRC-MC20-90-10



To facilitate a fast design-in process for developers, RRC is providing 3D data of the mating connectors and the battery housings of RRC smart batteries. Please contact your RRC representative. For further information on the RRC smart batteries please refer to the RRC website ([www.rrc-ps.com](http://www.rrc-ps.com)).

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