

R78Q Series Micro-miniature Rectangular Electrical Connectors

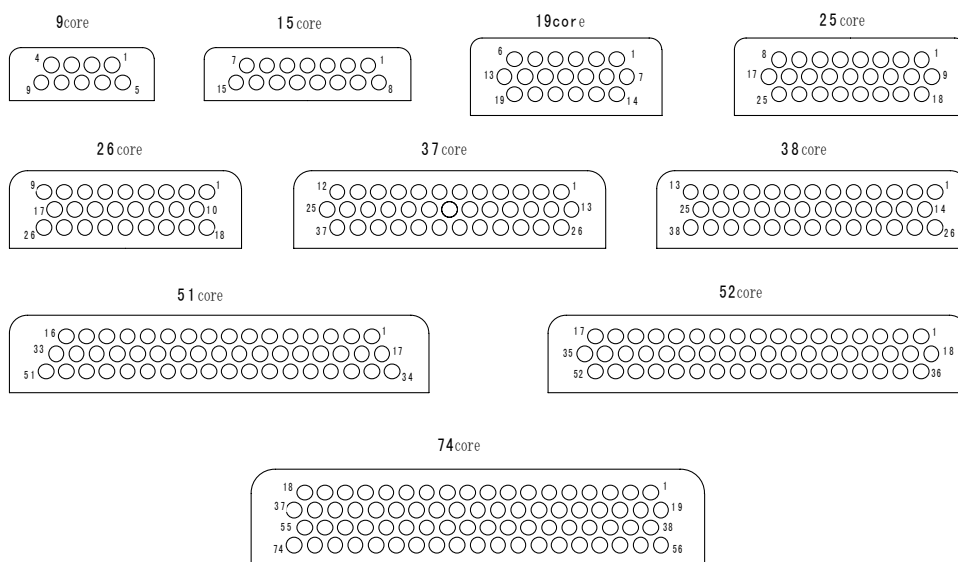
Product brief introduction

- comply with GJB2446
- Contact couples are elastic twisted wire pin(twist pin) and rigid socket with reliable contact.
- metallic shielding shell with cable clamp and quick lock device
- Many types of termination such as crimp, soldering, straight and right angle PCB soldering.
- plug and receptacle are loaded with pins or sockets
- ten types of contact numbers of 9, 15, 19, 25, 26, 37, 38, 51, 52 and 74
- implemented enterprise standard: 21E0.204.106JT





Main technical performance

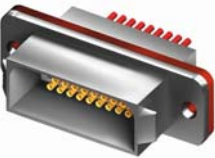

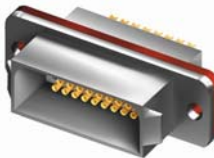
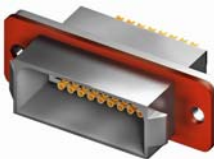


- operation temperature: $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$
- RH: $+40^{\circ}\text{C}$, 98%
- vibration: 10~2000 Hz, 254 m/s²
- random vibration : power spectrum density $0.4\text{G}^2/\text{Hz}$, total acceleration RMS 23.1G
- low pressure: 4KPa
- shock: 980 m/s²
- contact resistance: $\leq 10\text{m}\Omega$
- current rating: 5A
- insulation resistance: $\geq 1000\text{M}\Omega$ (9、19、25、37、52、74)
 $\geq 5000\text{M}\Omega$ (15、26、38、51)
- dielectric withstanding voltage : 800 V (9、19、25、37、52、74)
1000 V (15、26、38、51)
- durability: 1000 cycles

Insertion arrangements (face view of pin insert)



product classification

plug(can be installed with both pin and socket)			
crimp		solder	
<p>general type (front push lock and rear pull release)</p>  <p>R78Q-xTJ(K)</p>	<p>quick lock type (rear pull lock and front push release)</p>  <p>R78Q-xTJ(K)-C</p>	<p>general type (front push lock and rear pull release)</p>  <p>R78Q-xTJ(K)H</p>	<p>quick lock type (rear pull lock and front push release)</p>  <p>R78Q-xTJ(K)H-C</p>

receptacle(can be installed with both pin and socket)		
crimp	solder	PCB soldering
<p>front panel mounting</p>  <p>R78Q-xZK(J)</p> <p>mounting behind panel</p>  <p>R78Q II -xZK(J)</p>	<p>front panel mounting</p>  <p>R78Q-xZK(J)H</p> <p>mounting behind panel</p>  <p>R78Q II -xZK(J)H</p>	<p>straight PCB</p>  <p>R78Q-xZK(J)N</p> <p>right angle PCB</p>  <p>R78Q-xZK(J)W</p>

Ordering Information

Plug ordering information

R78Q15 T J H C (additional notes)
1 2 3 4 5 6 7

- 1 basic series: R78Q
- 2 number of contacts: 9、15、19、25、26、37、38、51、52、74
- 3 connector type: T—plug
- 4 contact type: J—pin; K—socket
- 5 types of termination: none—crimp; H—soldering
- 6 plug type: none—general type; C—quick lock
- 7 "additional notes(only for crimp product): details see "ordering information"

Receptacle ordering information

R78Q II 15 Z K H (additional notes)
1 2 3 4 5 6 7

- 1 basic series: R78Q
- 2 mounting types (only for crimp and soldering receptacle): none—front panel mounting; II—mounting behind panel
- 3 number of contacts: 9、15、19、25、26、37、38、51、52、74
- 4 connector type: Z—receptacle
- 5 contact type: J—pin; K—socket
- 6 types of termination: none—crimp; H—soldering; N—straight PCB; W—right angle PCB
- 7 additional notes(only for crimp product): details see "ordering information"

Ordering information

1. If there is no special note when customer is choosing crimp products. R78Q series' wire size, color and length are: AFR-250-1×0.15-250V—jacinth, wire length protrusion from shell L=200mm;

If customer have special requirements on wires, additional notes shall be added after plug or receptacle part number, details are as follows:

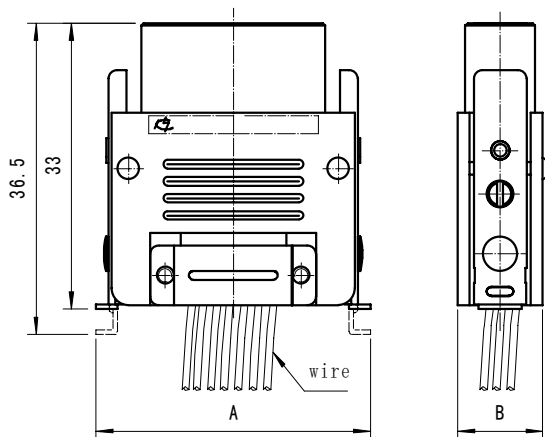
- 1) wire section: directly mark out wire section area value, if omitted, it's 0.15mm²; wire section area for this series is 0.1~0.2mm²;
- 2) wire color: directly mark out color. if omitted, it's jacinth;
- 3) wire length: wire length protrusion from shell(in mm). if omitted, it's 200mm.

For example: customer order is R78Q-9TJ and requires AFR-250-1×0.2-250V red wire of 0.6m in length, ordering part number is R78Q-9TJ (0.2 red L600) .

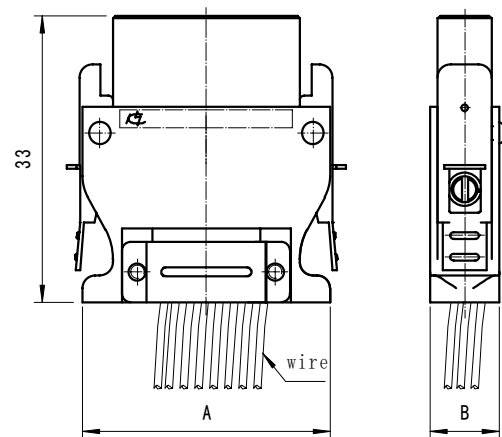
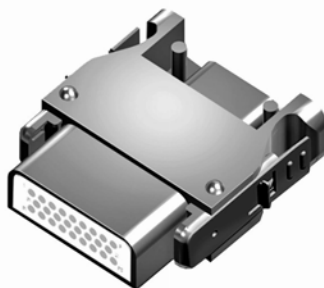
Outline dimensions

Crimp plug

R78Q-xTJ(K) general type
(front push lock and rear pull release)



R78Q-xTJ(K)-C quick lock type
(rear pull lock and front push release)

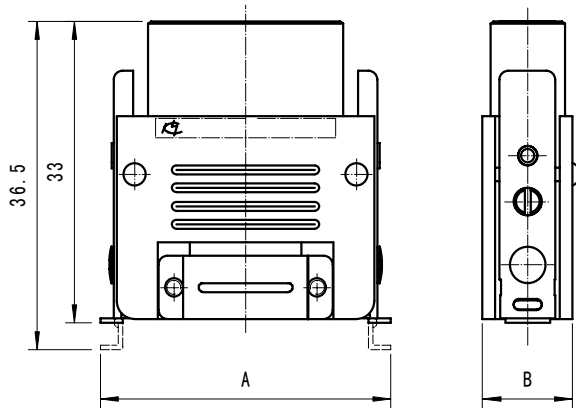


P/N	A	B
R78Q-9TJ(K)	24.2	8
R78Q-15TJ(K)	29.2	8
R78Q-19TJ(K)	28.2	10
R78Q-25TJ(K)	31.6	10
R78Q-26TJ(K)	31.6	10
R78Q-37TJ(K)	38.2	10
R78Q-38TJ(K)	38.2	10
R78Q-51TJ(K)	47.2	10
R78Q-52TJ(K)	47.2	10
R78Q-74TJ(K)	49.2	11.6

P/N	A	B
R78Q-9TJ(K)-C	21.2	8
R78Q-15TJ(K)-C	26.3	8
R78Q-19TJ(K)-C	25.2	10
R78Q-25TJ(K)-C	28.6	10
R78Q-26TJ(K)-C	28.6	10
R78Q-37TJ(K)-C	35.2	10
R78Q-38TJ(K)-C	35.2	10
R78Q-51TJ(K)-C	44.2	10
R78Q-52TJ(K)-C	44.2	10
R78Q-74TJ(K)-C	46.2	11.6

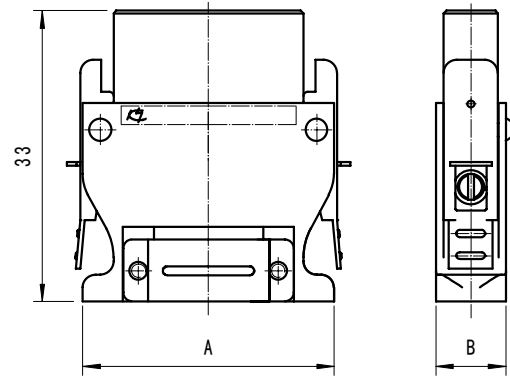
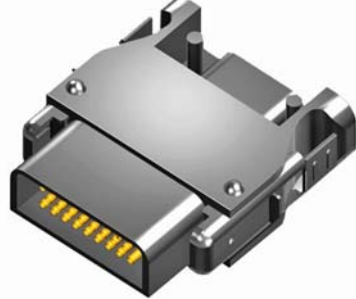
solder plug

R78Q-×TJ(K)H general type
(front push lock and rear pull release)



P/N	A	B
R78Q-9TJ(K)H	24.2	8
R78Q-15TJ(K)H	29.2	8
R78Q-19TJ(K)H	28.2	10
R78Q-25TJ(K)H	31.6	10
R78Q-26TJ(K)H	31.6	10
R78Q-37TJ(K)H	38.2	10
R78Q-38TJ(K)H	38.2	10
R78Q-51TJ(K)H	47.2	10
R78Q-52TJ(K)H	47.2	10
R78Q-74TJ(K)H	49.2	11.6

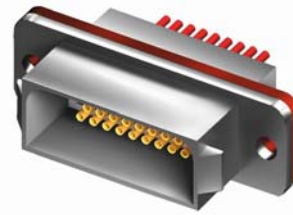
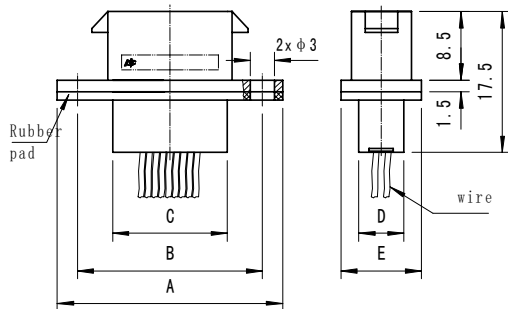
R78Q-×TJ(K)H-C quick lock
type (rear pull lock and front push
e)



P/N	A	B
R78Q-9TJ(K)H-C	21.2	8
R78Q-15TJ(K)H-C	26.3	8
R78Q-19TJ(K)H-C	25.2	10
R78Q-25TJ(K)H-C	28.6	10
R78Q-26TJ(K)H-C	28.6	10
R78Q-37TJ(K)H-C	35.2	10
R78Q-38TJ(K)H-C	35.2	10
R78Q-51TJ(K)H-C	44.2	10
R78Q-52TJ(K)H-C	44.2	10
R78Q-74TJ(K)H-C	46.2	11.6

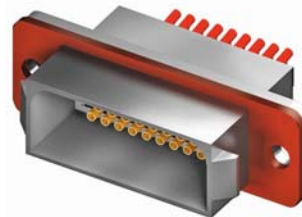
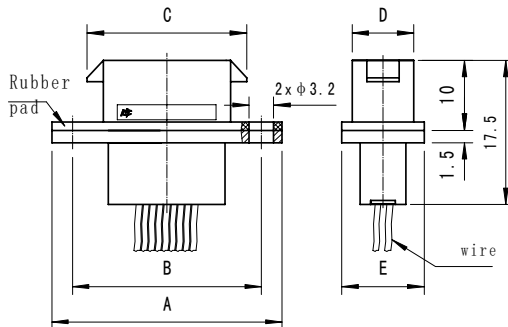
Crimp receptacle

- R78Q-xZK(J) crimp receptacle mounted before panel



P/N	A	B	C	D	E
R78Q-9ZK(J)	28	23	14.2	5.6	10
R78Q-15ZK(J)	34	29	19.4	5.6	10
R78Q-19ZK(J)	32	27	18.2	8.1	12
R78Q-25ZK(J)	35.4	30.4	21.6	8.1	12
R78Q-26ZK(J)	35.4	30.4	21.6	8.1	12
R78Q-37ZK(J)	42	37	28.2	8.1	12
R78Q-38ZK(J)	42	37	28.2	8.1	12
R78Q-51ZK(J)	51	46	37.2	8.1	12
R78Q-52ZK(J)	51	46	37.2	8.1	12
R78Q-74ZK(J)	53	48	39.2	9.7	14

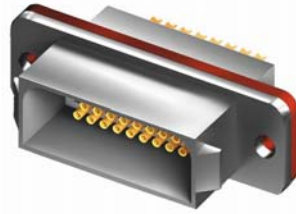
- R78Q II -xZK(J) crimp receptacle mounted behind panel



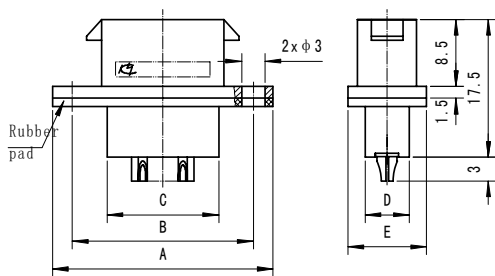
P/N	A	B	C	D	E
R78Q II -9ZK(J)	30.2	25.2	19.3	7.5	11.5
R78Q II 15ZK(J)	36.2	31.2	25.3	8.9	12
R78Q II 19ZK(J)	34.2	29.2	23.3	9.8	14
R78Q II 25ZK(J)	37.5	32.5	26.7	9.8	14
R78Q II 26ZK(J)	37.5	32.5	26.7	9.8	14
R78Q II 37ZK(J)	44	39	33.3	9.8	14
R78Q II 38ZK(J)	44	39	33.3	9.8	14
R78Q II 51ZK(J)	53	48	42.3	9.8	14
R78Q II 52ZK(J)	53	48	42.3	9.8	14
R78Q II 74ZK(J)	55	50	44.3	11.8	16

Solder receptacle

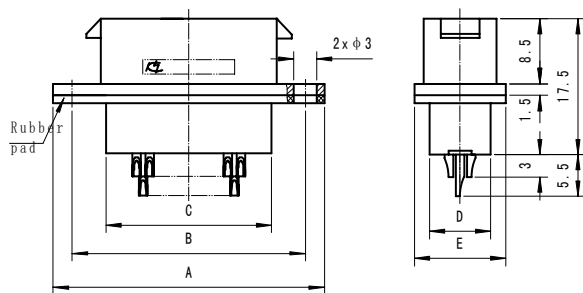
- R78Q-×ZK(J)H solder receptacle mounted before panel



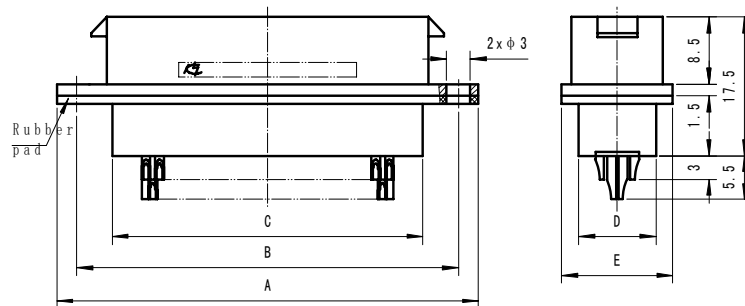
R78Q-9、15ZK(J)H



R78Q-19~52ZK(J)H

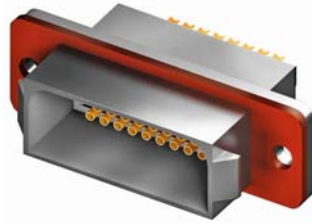


R78Q-74ZK(J)H

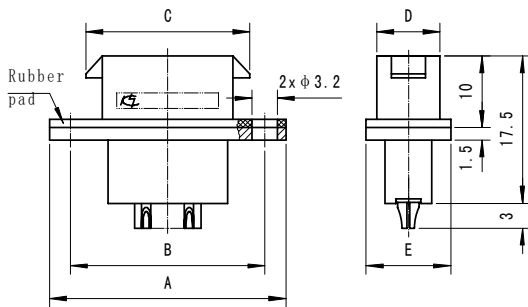


P/N	A	B	C	D	E
R78Q-9ZK(J)H	28	23	14.2	5.6	10
R78Q-15ZK(J)H	34	29	19.4	5.6	10
R78Q-19ZK(J)H	32	27	18.2	8.1	12
R78Q-25ZK(J)H	35.4	30.4	21.6	8.1	12
R78Q-26ZK(J)H	35.4	30.4	21.6	8.1	12
R78Q-37ZK(J)H	42	37	28.2	8.1	12
R78Q-38ZK(J)H	42	37	28.2	8.1	12
R78Q-51ZK(J)H	51	46	37.2	8.1	12
R78Q-52ZK(J)H	51	46	37.2	8.1	12
R78Q-74ZK(J)H	53	48	39.2	9.7	14

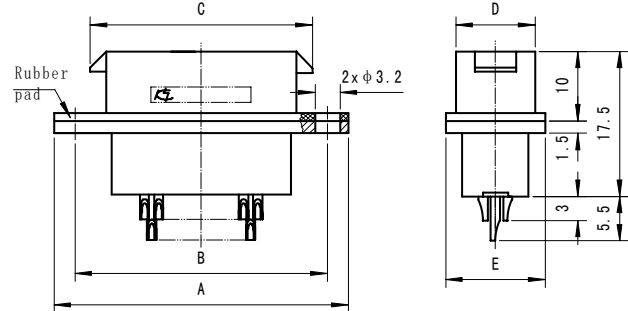
R78Q II ×ZK(J)H solder receptacle mounted behind panel



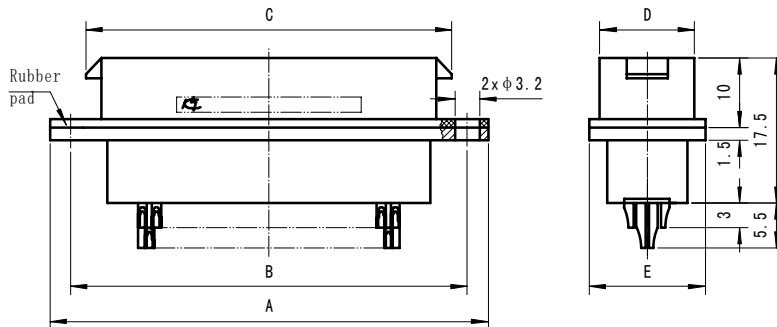
R78Q II 9、15ZK(J)H



R78Q II 19~52ZK(J)H



R78Q II 74ZK(J)H



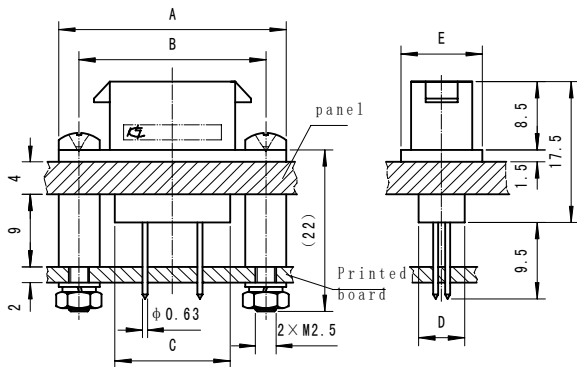
P/N	A	B	C	D	E
R78Q II 9ZK(J)H	30.2	25.2	19.3	7.5	11.5
R78Q II -15ZK(J)H	36.2	31.2	25.3	8.9	12
R78Q II 19ZK(J)H	34.2	29.2	23.3	9.8	14
R78Q II 25ZK(J)H	37.5	32.5	26.7	9.8	14
R78Q II 26ZK(J)H	37.5	32.5	26.7	9.8	14
R78Q II 37ZK(J)H	44	39	33.3	9.8	14
R78Q II 38ZK(J)H	44	39	33.3	9.8	14
R78Q II 51ZK(J)H	53	48	42.3	9.8	14
R78Q II 52ZK(J)H	53	48	42.3	9.8	14
R78Q II 74ZK(J)H	55	50	44.3	11.8	16

PCB receptacle

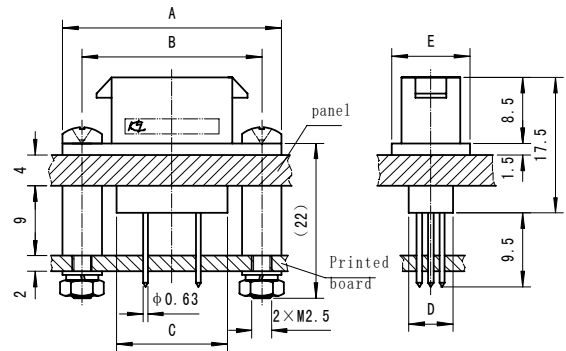
R78Q-xZK(J)N straight PCB receptacle



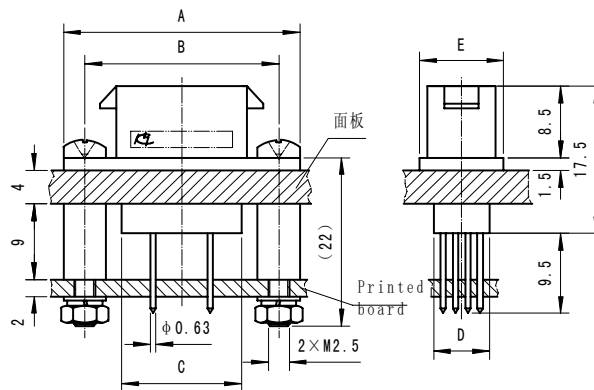
R78Q-9、15ZK(J)N



R78Q-19~52ZK(J)N



R78Q-74ZK(J)N

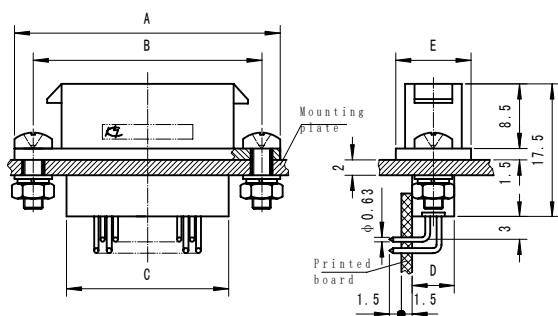


P/N	A	B	C	D	E
R78Q-9ZK(J)N	28	23	14.2	5.6	10
R78Q-15ZK(J)N	34	29	19.4	5.6	10
R78Q-19ZK(J)N	32	27	18.2	8.1	12
R78Q-25ZK(J)N	35.4	30.4	21.6	8.1	12
R78Q-26ZK(J)N	35.4	30.4	21.6	8.1	12
R78Q-37ZK(J)N	42	37	28.2	8.1	12
R78Q-38ZK(J)N	42	37	28.2	8.1	12
R78Q-51ZK(J)N	51	46	37.2	8.1	12
R78Q-52ZK(J)N	51	46	37.2	8.1	12
R78Q-74ZK(J)N	53	48	39.2	9.7	14

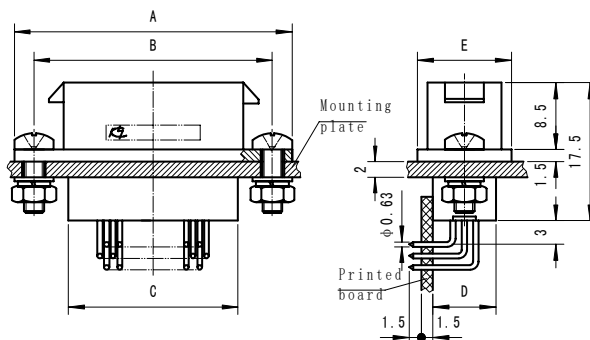
● R78Q-×ZK(J)W right angle PCB receptacle



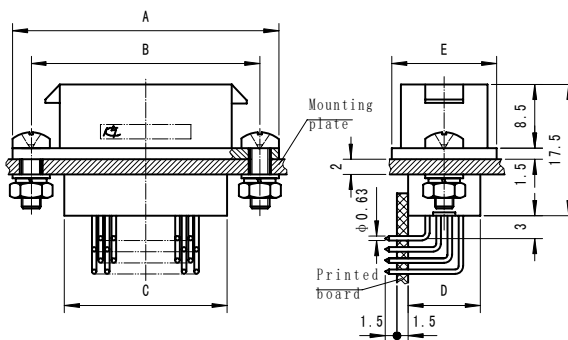
R78Q-9, 15ZK(J)W



R78Q-19~52ZK(J)W



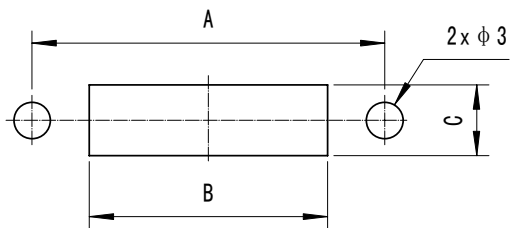
R78Q-74ZK(J)W



P/N	A	B	C	D	E
R78Q-9ZK(J)W	28	23	14.2	5.6	10
R78Q-15ZK(J)W	34	29	19.4	5.6	10
R78Q-19ZK(J)W	32	27	18.2	8.1	12
R78Q-25ZK(J)W	35.4	30.4	21.6	8.1	12
R78Q-26ZK(J)W	35.4	30.4	21.6	8.1	12
R78Q-37ZK(J)W	42	37	28.2	8.1	12
R78Q-38ZK(J)W	42	37	28.2	8.1	12
R78Q-51ZK(J)W	51	46	37.2	8.1	12
R78Q-52ZK(J)W	51	46	37.2	8.1	12
R78Q-74ZK(J)W	53	48	39.2	9.7	14

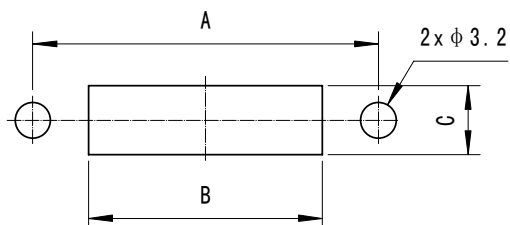
Recommended panel mounting cutout dimensions

Mounting cutout dimensions before panel



Number of contacts	A	B	C
9	23	14.4	5.8
15	29	19.6	5.8
19	27	18.4	8.3
25	30.4	21.8	8.3
26	30.4	21.8	8.3
37	37	28.4	8.3
38	37	28.4	8.3
51	46	37.4	8.3
52	46	37.4	8.3
74	48	39.4	9.9

Mounting cutout dimensions behind panel



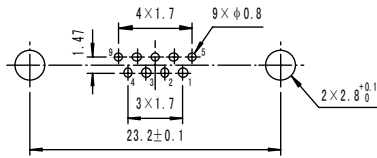
Number of contacts	A	B	C
9	25.2	19.4	7.8
15	31.2	25.4	9.1
19	29.2	23.4	10
25	32.5	26.8	10
26	32.5	26.8	10
37	39	33.4	10
38	39	33.4	10
51	48	42.4	10
52	48	42.4	10
74	50	44.4	12

Recommended PCB cutout dimensions

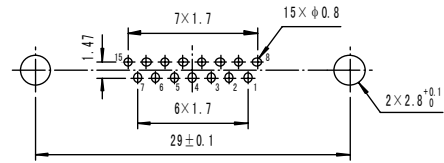
Straight PCB receptacle cutout dimensions (the figure below is R78Q-xZKN PCB cutout dimensions)

Note: R78Q-xZJN and R78Q-xZKN cutout dimensions are identical. Just symmetrize hole numbers by center line.

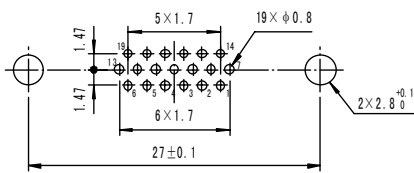
R78Q-9ZKN



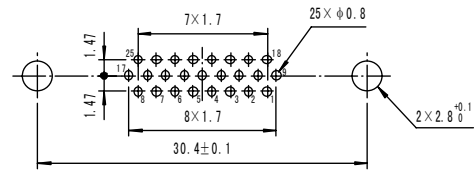
R78Q-15ZKN



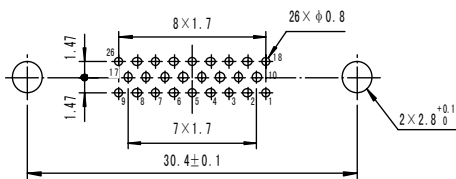
R78Q-19ZKN



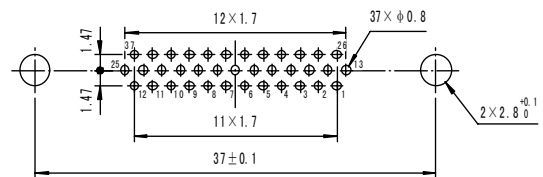
R78Q-25ZKN



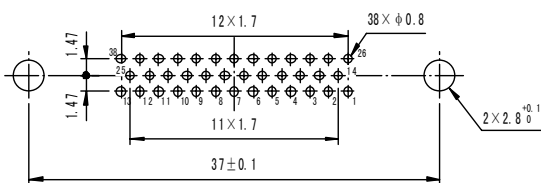
R78Q-26ZKN



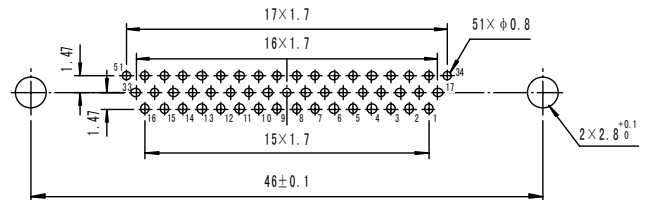
R78Q-37ZKN



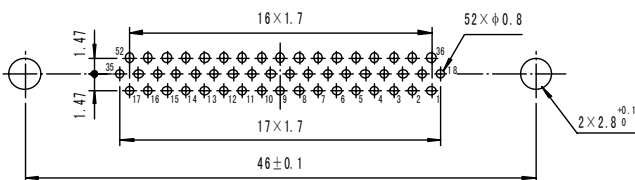
R78Q-38ZKN



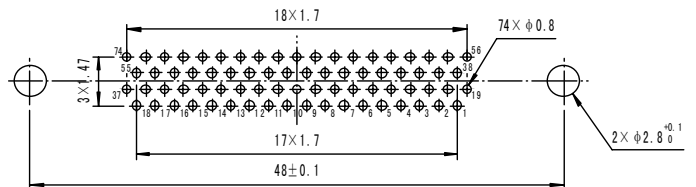
R78Q-51ZKN



R78Q-52ZKN



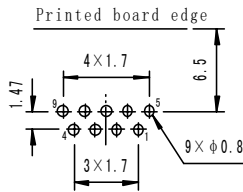
R78Q-74ZKN



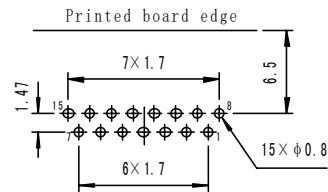
Right angle PCB receptacle cutout dimensions (the figure below is R78Q-xZKW PCB cutout dimensions)

Note: R78Q-xZJW and R78Q-xZKW cutout dimensions are identical. Just symmetries hole numbers by center line.

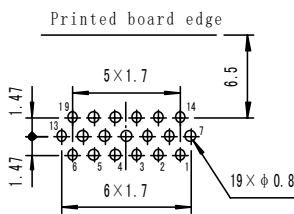
R78Q-9ZK W



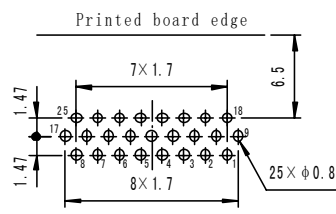
R78Q-15 ZKW



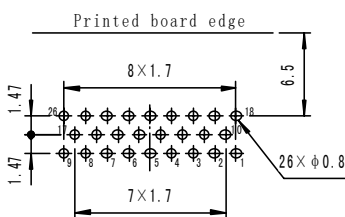
R78Q-19ZK W



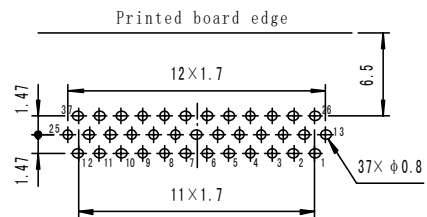
R78Q-25 ZKW



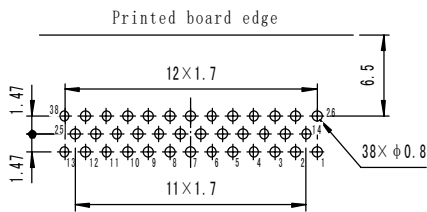
R78Q-26ZK W



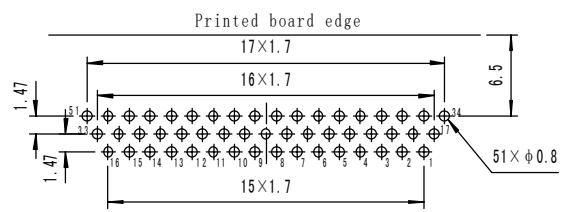
R78Q-37 ZKW



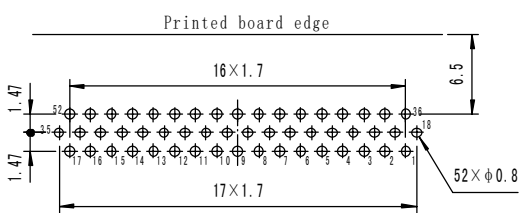
R78Q-38ZKW



R78Q-51ZKW



R78Q-52ZKW



R78Q-74ZKW

