

MATENG

J13B SERIES

CATALOG

J13B SERIES

MICRO-MINIATURE RECTANGULAR ELECTRICAL CONNECTORS

PRODUCT BRIEF INTRODUCTION

- Plug with elastic twisted wire pins and with receptacle rigid sockets.
- Contact spacing 1.27mm, single row
- Number of contacts:1~60
- Many types of termination such as crimp, soldering, straight and right angle PCB soldering and surface mounting PCB.
- End modified for PCB
- Quick locking devices or guiding devices for plug and receptacle
- Enterprise standard: 21E0.204.118JT

MAIN TECHNICAL PERFORMANCES

- operation temperature: -55°C~+125°C
- vibration: 10~2000 Hz, 196 m/s²
- shock: 735 m/s²
- current rating: 3A
- insulation resistance: ≥5000 MΩ
- dielectric withstanding voltage: 800V
- durability: 500 cycles

DESIGNATION

J13B—1 D1—004—32 3—03 00
1 2 3 4 5 6 7 8

- Basic series: J13B—Micro-miniature Rectangular Electrical Connectors with spacing of 1.27mm
- Number of contact row: 1—single row

Configuration	
Plug	Receptacle
11 with mounting holes, crimping or solder cup	21 with mounting holes, crimping or solder cup
31 without mounting holes, crimping or solder cup	41 without mounting holes, crimping or solder cup
51 with mounting holes, right angle, double rows with pins spacing of 1.27mm	61 with mounting holes, right angle, double rows with pins spacing of 1.27mm
71 with mounting holes, right angle, double rows with pins spacing of 2.54mm	81 with mounting holes, right angle, double rows with pins spacing of 2.54mm
91 without mounting holes, right angle, double rows with pins spacing of 1.27mm	A1 without mounting holes, right angle, double rows with pins spacing of 1.27mm

B1 without mounting holes, right angle, double rows with pins spacing of 2.54mm	C1 without mounting holes, right angle, double rows with pins spacing of 2.54mm
D1 with mounting holes, right angle, single row of soldering pins	E1 with mounting holes, right angle, single row of soldering pins
F1 without mounting holes, right angle, single row of soldering pins	G1 without mounting holes, right angle, single row of soldering pins
H1 without mounting holes, straight, double rows with pins spacing of 2.54mm	J1 without mounting holes, straight, double rows with pins spacing of 2.54mm

— Number of contacts: 001~060

(indicated by 3 digits; When use quick locking devices or guiding devices, the max number of contacts shall be reduced)

— Contacts and type of termination:

For plug	For receptacle
11 pin solder cup	21 socket solder cup
12 pin straight PCB length of soldering pin:2.8mm	22 socket straight PCB length of soldering pin:2.8mm
13 pin straight PCB length of soldering pin:3.8mm	23 socket straight PCB length of soldering pin:3.8mm
16 pin crimping wire type	26 socket crimping wire type
32 pin right angle PCB length of soldering pin:2.8mm	43 socket right angle PCB length of soldering pin:2.8mm
33 pin right angle PCB length of soldering pin:3.8mm	44 socket right angle PCB length of soldering pin:3.8mm
51 pin PCB length of soldering pin:1mm	

— Contact plating: 1—crimp and soldering type; 3—gold plating on PCB pins

locking devices or guiding devices:

For plug	For receptacle
00 without locking devices or guiding devices	00 without locking devices or guiding devices
01~60 locking box, mounted on one side (mounting position see "locking and mounting positions")	01~60 locking tag, mounted on one side (mounting position see "locking and mounting positions")
64 one guiding socket (in the center cavity *)	61 one guiding pin (in the center cavity *)
65 one guiding socket (1# cavity)	62 one guiding pin (1# cavity)
66 one guiding socket (on the opposite end of 1# cavity)	63 one guiding pin (on the opposite end of 1# cavity)
68 two guiding sockets (one on each end)	67 two guiding pins (one on each end)
70 locking box (one on each end)	71 locking tag (locking blade)

— Cabling type: 00—without cable; *—cabled (see "cable code cross reference table" for details).

NOTE:

- When number of contacts N is even number, center cavity is $N/2+1$
- When number of contacts N is odd number, center cavity is $N/2+1(N+1)/2+1$

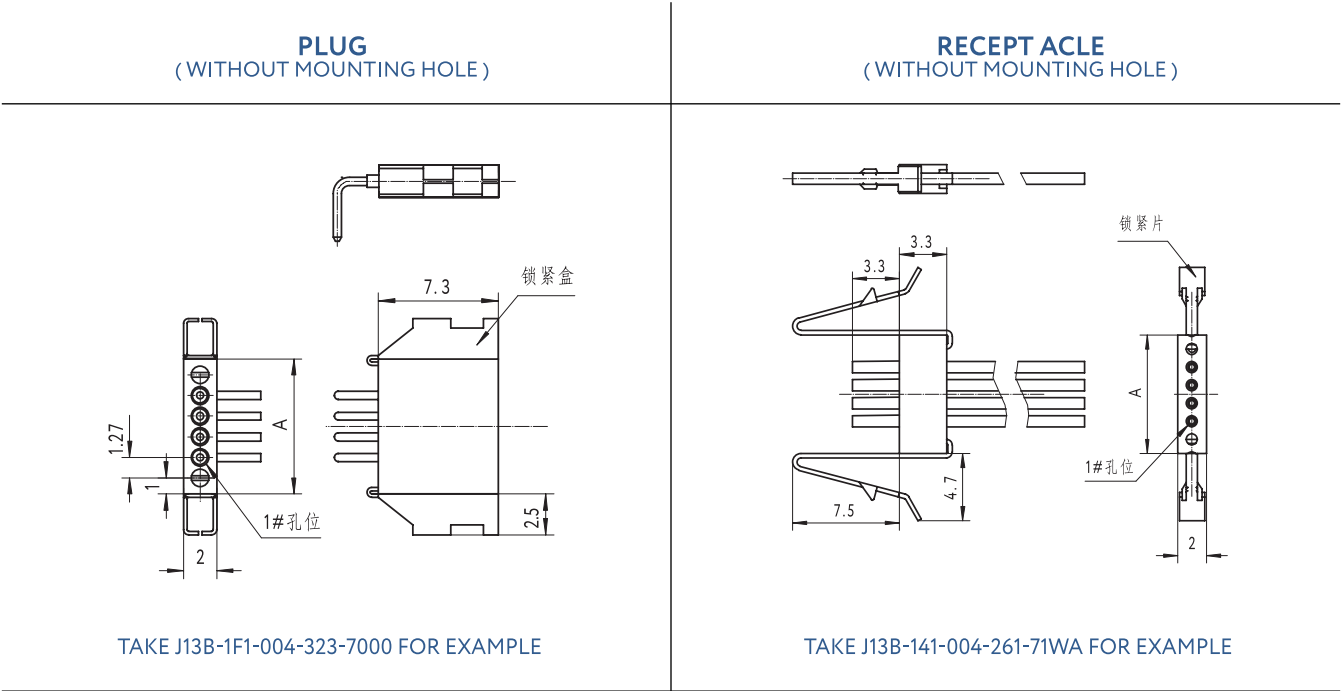
CABLE CODE CROSS REFERENCE TABLE

Code	Size mm ²	Color	Length mm ²	Code	Size mm ²	Color	Length mm ²	Code	Size mm ²	Color	Length mm ²
WA	0.15	Multi	150	WN	0.12	Multi	150	XA	0.07	Multi	150
WB	0.15	Multi	300	WP	0.12	Multi	300	XB	0.07	Multi	300
WC	0.15	Multi	460	WQ	0.12	Multi	460	XC	0.07	Multi	460
WD	0.15	Multi	920	WR	0.12	Multi	920	XD	0.07	Multi	920
WE	0.15	White	150	WS	0.12	White	150	XE	0.07	White	150
WF	0.15	White	300	WT	0.12	White	300	XF	0.07	White	300
WG	0.15	White	460	WU	0.12	White	460	XG	0.07	White	460
WH	0.15	White	920	WU1	0.12	White	500	XH	0.07	White	920
WJ	0.15	Yellow	150	WV	0.12	White	920	XJ	0.07	Yellow	150
WK	0.15	Yellow	300	WW	0.12	Yellow	150	XK	0.07	Yellow	300
WL	0.15	Yellow	460	WX	0.12	Yellow	300	XL	0.07	Yellow	460
WM	0.15	Yellow	920	WY	0.12	Yellow	460	XM	0.07	Yellow	920
				WZ		Yellow	920				

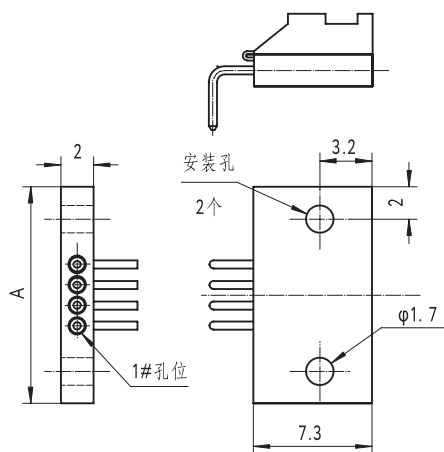
NOTE:

Cable brand is AFR-250; Multicolor stands for cable colors for each cavity are arranged and cycled
In a certain sequence: black, brown, red, orange, yellow, green, blue, purple, grey and white.

OUTLINE DIMENSIONS:

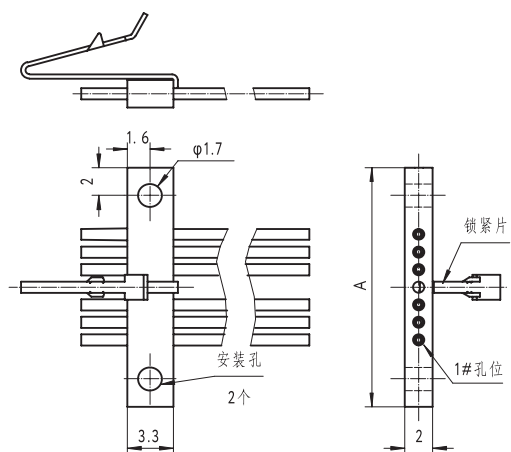


PLUG (WITH MOUNTING HOLE)



TAKE J13B-1D1-004-323-0300 FOR EXAMPLE

RECEPTACLE (WITH MOUNTING HOLE)



TAKE J13B-121-006-261-04WA FOR EXAMPLE

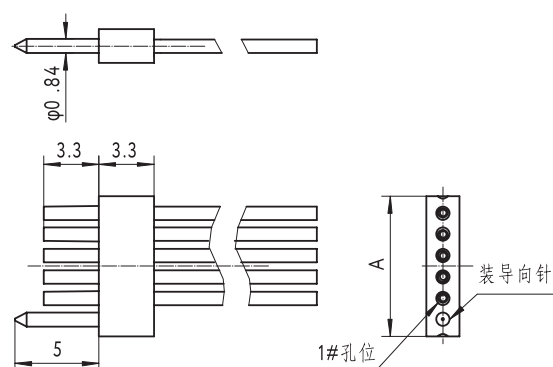
CALCULATION METHOD FOR CONNECTOR LENGTH "A"

Number of contacts $\times 1.27$: ____
 +fixed length: 0.73
 +3.81/socket (with mounting hole): ____
 +1.27/piece (with locking devices): ____
 +1.27/piece (with guiding devices): ____
 Total length "A"= ____

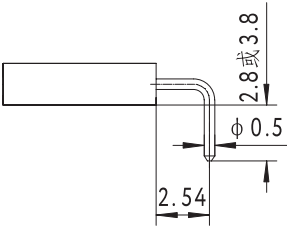
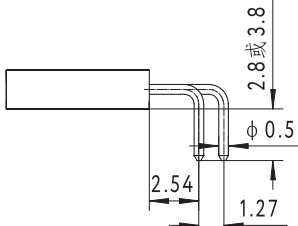
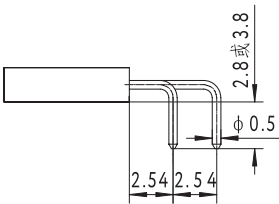
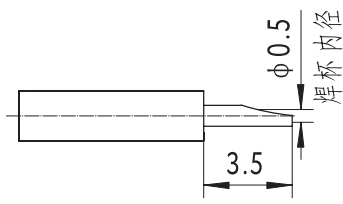
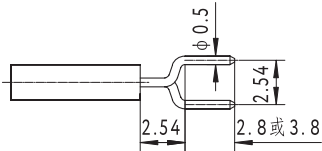
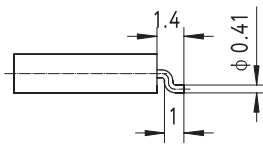
NOTE:

The max Length: 79.47mm
 The max number of contacts: 6
 (including accessories and mounting holes)

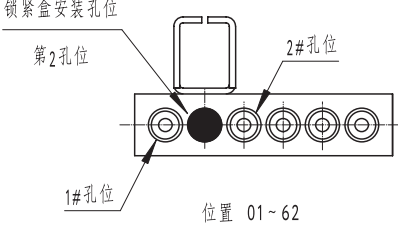
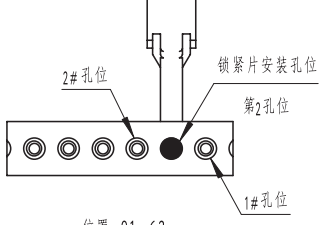
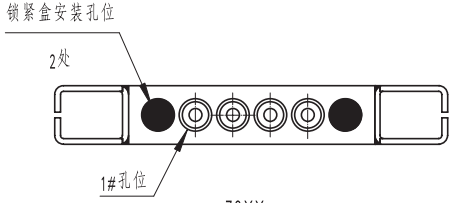
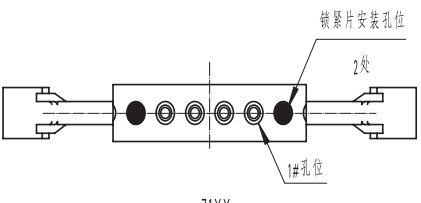
GUIDING PIN DIMENSIONS



TYPES OF TERMINATION

RIGHT ANGLE PCB, SINGLE ROW OF SOLDERING PINS	RIGHT ANGLE PCB, DOUBLE ROWS WITH PINS SPACING OF 1.27MM
	
RIGHT ANGLE PCB, DOUBLE ROWS WITH PINS SPACING OF 2.54MM	SOLDER CUP
	
STRAIGHT PCB, DOUBLE ROWS WITH PINS SPACING OF 2.54MM	SURFACE MOUNT PCB (ONLY FOR PLUG)
	

LOCKING DEVICES MOUNTING POSITIONS

PLUG WITH LOCKING BOX	RECEPTACLE WITH LOCKING TAG
 <p>位置 01~62</p> <p>示例: J13B-131-005-161-02</p>	 <p>位置 01~62</p> <p>示例: J13B-141-005-261-02</p>
WN	WN
 <p>-70XX</p> <p>示例: J13B-131-004-161-ZQWN</p>	 <p>-71XX</p> <p>示例: J13B-141-004-261-71 WN</p>



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