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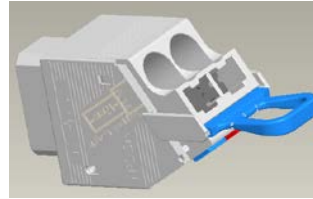
Version: 1.0

CZ80-2AT-63A Plug Technical Specification

AVIC JONHON OPTRONIC TECHNOLOGY CO., LTD.

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CZ80-2AT-63A Plug Technical Specification



● **Material Name:** plug

● **Specification:** CZ80-2AT-63A

● **Parameters**

■ **Electrical Characteristics**

A、Contact Resistance	$\leq 5\text{m}\Omega$
B、Rated Current	63A
C、Rated Voltage	85V DC
D、Dielectric Withstanding Voltage	1200V leakage current: $\leq 5\text{mA}$
E、Insulation Resistance	$\geq 5000\text{ M}\Omega$

■ **Mechanical Properties**

A、Durability	200times (the top lever: 50times)
B、Total unmating force	10~45N
C、Total mating force	$\leq 55\text{N}$
D、Contact Holding Force	4~15N
E、Cable	4 mm ² ~16 mm ²

■ **Materials and Surface Treatment**

a)Metal Materials, Processes, Surface Treatment

Metal materials	Copper Alloy:T2
Processes	pressing
Surface Treatment	the bottom of cladding material: nickelplate $\geq 1.27\mu\text{m}$ tinning locally , the contact area:gold-plated 0.3 μm

b)Plastic materials, Processes, Forming

Plastic materials、Color	Thermoplastic PBT and PA66(gray) Ring insulator (blue)
Processes	Injection
Fire-protection rating	UL94 V-0

■ **Work Environment**

A、Temperature	-40℃~+125℃(Ring insulator:-40℃~+85℃)
B、Humidity	40℃ , 95±3%
C、Shock、Vibration	10~500~10 Hz,10m/s ²
D、Corrosive gas environment	48h(Only directed against contact area of gold-plated)

■ **contact**

Mode of connection	Crimping wire
the contact area	The front of contact 3mm

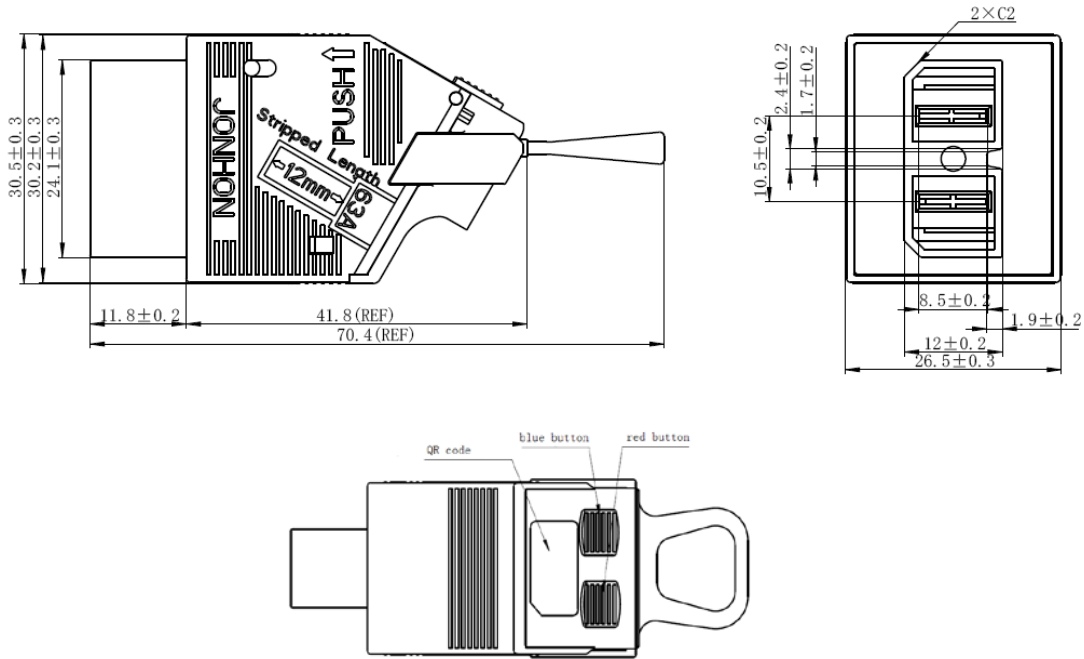
■ **RoHS6 Compliant:** Meet

■ **Mating Type**

Mate with CZ80-2Z-63A.

● **Production Drawing**

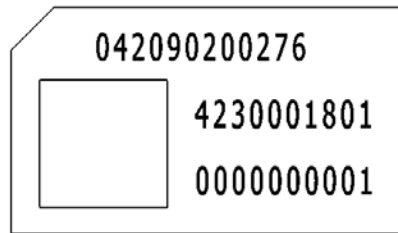
■ **Shape Drawing**



NOTE:the size of 70.4,41.8 is reference size

● Label information

Label size: 14mm×8mm



Label contents: consists of a QR Code and 3 numbers. The implication of the QR Code is the 3 numbers,too.

e.g. 042090200276 means CZ80-2AT-63A;423000 means JONHON;18 means the year of 2018 ;01 means the month of Month;0000000001 means serial number.

● Operation instruction

1. Operation instruction on the mating and separation of plug and receptacle

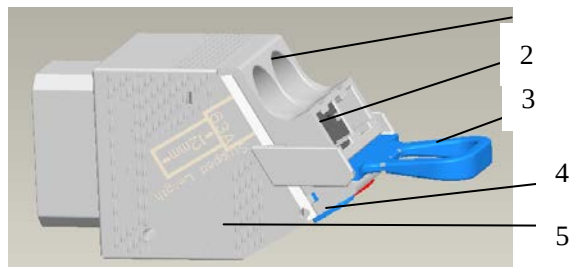
Mating: Operator pushes the outer shell of plug marked with PUSH, the direction of force is consistent with the direction of arrow marked on the outer shell. The plug is mated with the applicable receptacle and then automatically locked.

Separation: Unlocking is achieved by pulling the ring insulator shown in figure 3. The direction of force is opposite to the direction of arrow marked on the outer shell.

2. Operation instruction on wiring

2.1 Preparation for wiring

Requirement on wire stripping: strip the wire and expose the wire core to 12~15mm as shown in figure 4



1 Crimping barrel 2 Top lever 3 Ring insulator 4 Button 5
Outer shell

3



Length of stripped wir

4

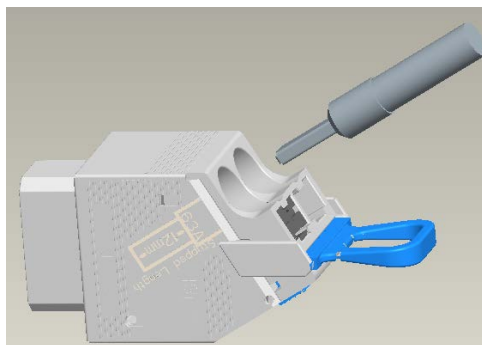
2.2 Operation instruction on tubular terminal

If the front end of wire is tubular terminal (cold pressed terminal), the tubular terminal can be directly installed on the plug from the crimping barrel as shown in figure 5.

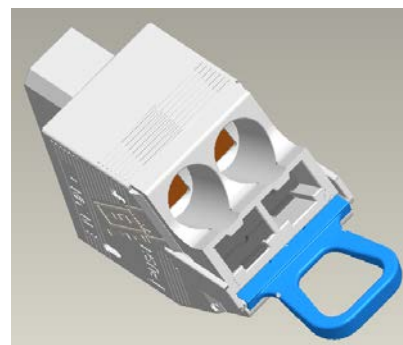
Steps: push the tubular terminal, the spring is opened by the tubular terminal and into the crimping barrel. The spring is automatically locked the tubular terminal. If the tubular terminal is pushed forward and can not be moved, which means the tubular terminal is in place. Pull the wire with hands and there is no breakaway, which means the termination is firm.

2.3 Operation instruction on non-tubular terminal

Press the top lever with slotted screwdriver. If the top lever can not be ejected, it is pressed in place as shown in figure 6

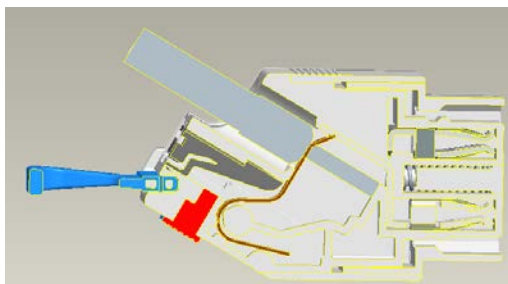


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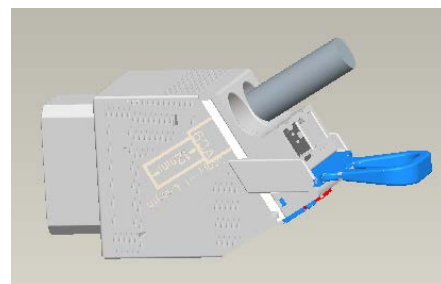


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The stripped wire is installed in the connector from the crimping barrel. The location from the front-end wire stripping location to the square shoulder of crimping barrel is as shown in figure 6 and 7. Press the red and blue button (press with the appropriate tool such as screwdriver handle and do not hit with the heavy objects such as hammer) and the top lever is automatically ejected. Pull the wire and there is no breakaway, which means the termination is firm. The crimped wire is as shown in figure 8.



7



8

2.4 Wire unlocking requirements

Firstly, press the top lever with slotted screwdriver until it is not ejected, which means the top lever is locked and the wire is successful unlocked.

Then remove the wire, press the red or blue button, the top lever is automatically reset under the spring force and the unlocking is completed.