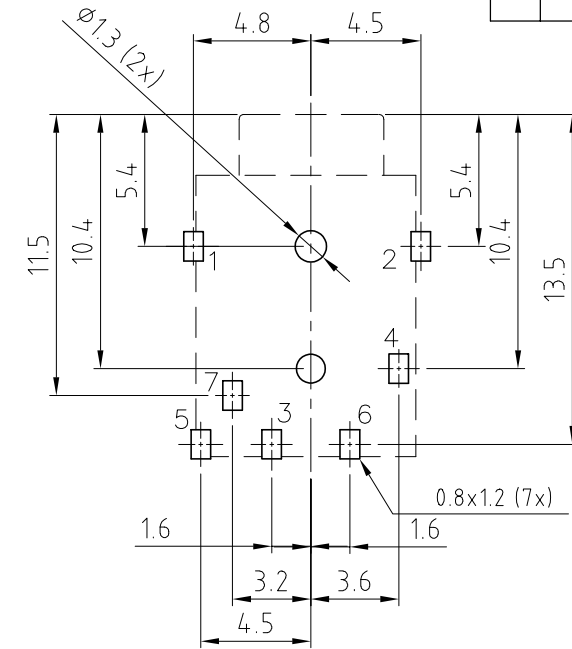
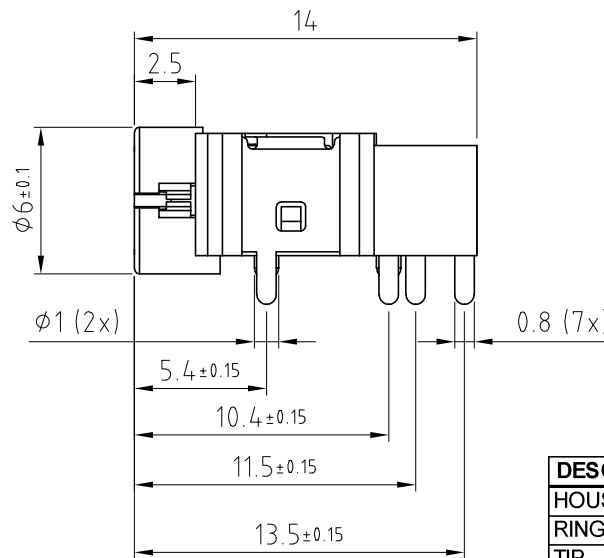
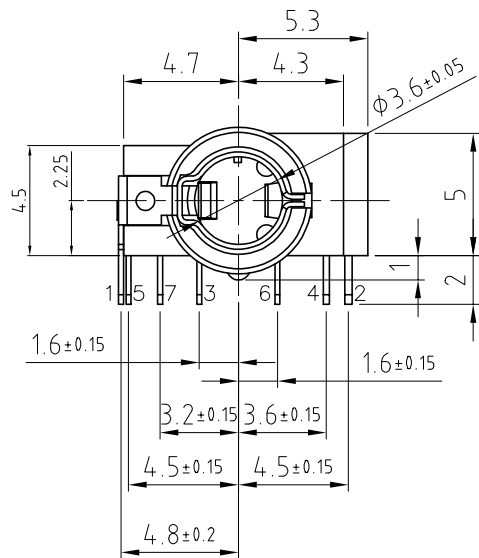
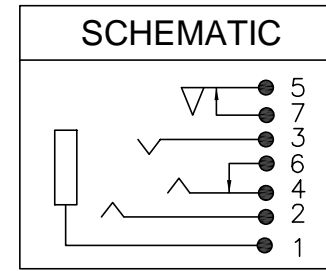
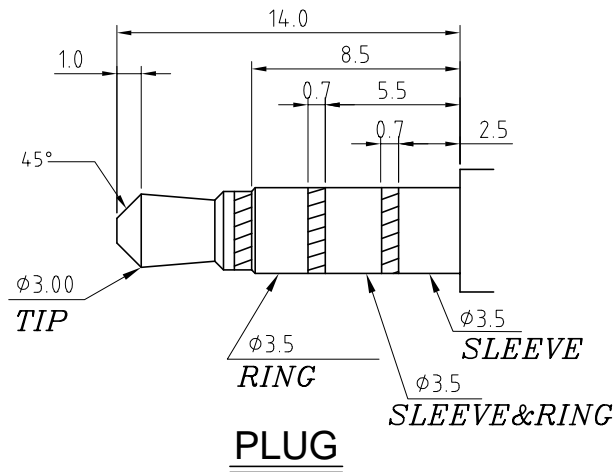
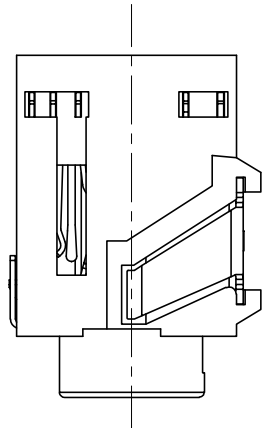


ISS.	AMEND	DATE
1	ISSUED	27/09/11
2	UPDATED	25/10/21



P.C.B LAYOUT  
BOTTOM VIEW

DESCRIPTION	MATERIAL	FINISH
HOUSING	NYLON	BLACK
RING	BRASS	SILVER PLATE
TIP	PHOSPHOR BRONZE	SILVER PLATE
TIP SHUNT	PHOSPHOR BRONZE	SILVER PLATE
SLEEVE	PHOSPHOR BRONZE	GOLD PLATE
TERMINAL-1	PHOSPHOR BRONZE	SILVER PLATE
TERMINAL-2	PHOSPHOR BRONZE	SILVER PLATE
TERMINAL-3	BRASS	SILVER PLATE

**RoHS**  
COMPLIANT

**TOLERANCE**  
NO DEC. PLACE ± 0.50  
1 DEC. PLACE ± 0.30  
2 DEC. PLACE ± 0.15  
HOLE Ø ± 0.10  
ANGLES ± 3°  
UNLESS OTHERWISE STATED

DO NOT SCALE

**Cliff Electronic Components Ltd.**

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Redhill, Surrey, RH1 2PF, England, UK  
Tel: 01737-771375 Fax: 01737-766012 Website: www.cliffuk.co.uk

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DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE STATED. WORK TO DIMENSIONS. REMOVE ALL BURRS. IF IN DOUBT ASK.

3rd ANGLE PROJECTION:

MATERIAL: SEE TABLE

FINISH: SEE TABLE

DRAWN: T.J.O.

APPROVED: D.P.J.

TITLE: 3.5mm PHONE JACK - 4 POLE

DRWG. No. **FC68129**

FORM: A4DRWGH

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**PART NUMBER:** FC68129  
**DESCRIPTION:** 3.5mm 4 POLE JACK SOCKET

A) SCOPE

This specification covers " 3.5Ø PHONE JACK " 3.5 Ø

B) CHARACTERISTICS

Standard atmospheric specified, measurements shall be made at temperature , humidity and air pressure within the following limit :

Ambient temperature	:	5 °C	to	35 °C
Relative humidity	:	45 %	to	85 %
Air pressure	:	85 Kpa	to	106 Kpa

Operating temperature range	:	-20 °C	to	60 °C
Storage temperature range	:	-25 °C	to	70 °C

C) ELECTRICAL CHARACTERISTICS

ITEM	TEST CONDITIONS	SPECIFICATION
(C1)Rated Voltage  Rated Current		DC 16V 20mA~0.3A
(C2)Insulation Resistance	A voltage of 500V DC shall be applied to the terminals. After which measurement shall be made. DC 500V	100M Ω or more ≥ 100M Ω

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ITEM	TEST CONDITIONS	SPECIFICATION
(C3)Contact Resistance	<p>Measurement shall be made at 1 K Hz with 100 mA or less (With the test plug as show in item G)</p> <p>&lt;1&gt;Initial before any testing</p> <p>a · Pin to contact or (T-TS, R-RS) (N.C.).</p> <p>b · Plug shield to socket or (T,R,S,) (N.O.).</p> <p>&lt;2&gt;After life test with mating plug</p> <p>a · Pin to contact or (T-TS, R-RS) (N.C.).</p> <p>b · Plug shield to socket or (T,R,S,) (N.O.).</p>	<p>Initial :</p> <p>a · 30mΩ or Less ≤ 30mΩ</p> <p>b · 50mΩ or Less ≤ 50mΩ</p> <p>After life :</p> <p>a · 60mΩ or Less ≤ 60mΩ</p> <p>b · 100mΩ or Less ≤ 100mΩ</p>
(C4)Dielectric Strength	<p>Withstand 0.5 mA (Trip current) 500V AC(50 or 60 Hz) between any open terminal for 1 minute.</p> <p>(Open terminal: Between each terminal which should not make contact , before plug insert to socket R-T,R-S, after plug insert</p>	Without distinct Damage

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	to socket R-RS, T-TS, ... .)	
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### D ) . MECHANICAL CHARACTERISTICS

ITEM	TEST CONDITIONS	SPECIFICATION
(D1) Insertion force and Withdrawal force	Initial	Insertion force
	( With the test plug as show in item G )	0.3kgf ~ 3kgf
		Withdrawal force
	0.3kgf ~ 3kgf	
	After life test 壽命試験後	Insertion force
	( With the test plug as show in item G )	挿入力
		0.2kgf ~ 2kgf
	Withdrawal force	
抜出力		
0.2kgf ~ 2kgf		
(D2) Terminal strength	Terminals must withstand a 500g minimum pull for 10 seconds before movement or break from housing occurs , but deformation of terminal is authorized .	

### E ) . ENDURANCE CHARACTERISTICS

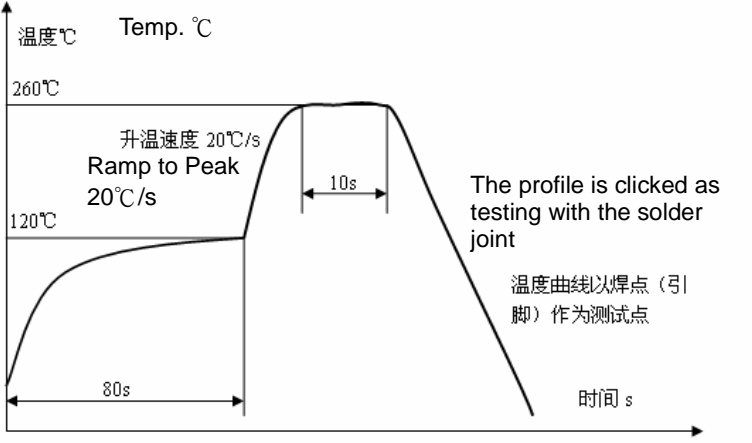
ITEM	TEST CONDITIONS
(E1) Life test	The life test shall consist of 5,000 cycles of insertion and withdrawal with test plug( Show in item G ), at a rate of 20 to 30 cycles per minute under no load .

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(E2)Soldering test	The terminal of JACK tested shall be dipped into soldering flux or equivalent for 5 ~ 10 seconds and then immersed into molten solder Sn at $260 \pm 5^{\circ}\text{C}$ for $3 \pm 0.5$ seconds , the coverage should more than 95% .
(E3)Soldering heat	The terminal for a printed circuit board . Temperature of solder : $260 \pm 5^{\circ}\text{C}$ Dip time : $5 \pm 1$ seconds .
(E4) Hand Soldering Temperature	Temperature of solder : $350 \pm 10^{\circ}\text{C}$ Dip time : $3 \pm 0.5$ seconds .

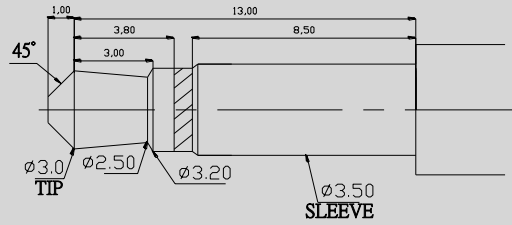
## F ) . DIP

ITEM	TEST CONDITIONS
The temperature peak without lead.	 <p>Pre-heating temperature is <math>25 \sim 120^{\circ}\text{C}</math> ,for a duration about 80 seconds.</p> <p>The peak temperature is <math>260^{\circ}\text{C}</math> , the duration for 10 seconds.</p>

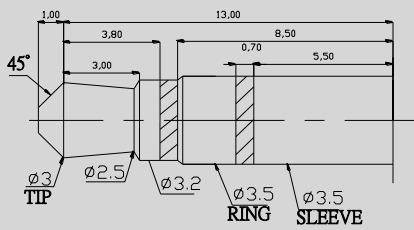
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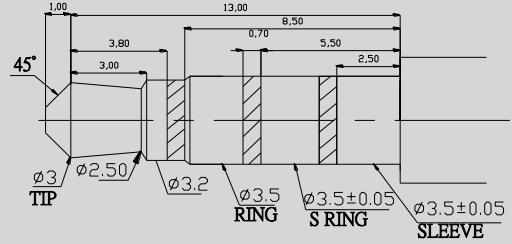
G ) . MATED PLUG



MONO PLUG



STEREO PLUG



4P PLUG

25/10/2021	A	Jacky	C	Dragon	M	Roy
	P		H		A	
	V		K		K	
	D		D		E	