

Cliff Electronic Components Ltd.

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SPECIFICATIONS FOR PART NUMBER: FC68127

A) SCOPE

This specification covers: 4 Pole Ø3.5 PHONE JACK

B) CHARACTERISTICS

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

| Ambient temperature | : | 5 | ${\mathbb C}$ | to | 35 | $^{\circ}$ |
|---------------------|---|----|---------------|----|-----|------------|
| Relative humidity | : | 45 | % | to | 85 | % |
| Air pressure | : | 85 | Kpa | to | 106 | Kpa |

Operating temperature range : $-20~^{\circ}\text{C}$ to 60 $^{\circ}\text{C}$ Storage temperature range : $-25~^{\circ}\text{C}$ to 70 $^{\circ}\text{C}$

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 \geqq 100M Ω |

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

| to socket R-RS, T-TS,) | |
|------------------------|--|
| | |
| | |

D) . MECHANICAL CHARACTERISTICS

| ITEM | TEST CONDITIONS | SPECIFICATION | | |
|---|--|------------------|--|--|
| | Initial | Insertion force | | |
| | (With the test plug as show in item | 0.3kgf ~ 3kgf | | |
| (D1)Insertion force and Withdrawal force | G) | Withdrawal force | | |
| | | 0.3kgf ~ 3kgf | | |
| | After life test | Insertion force | | |
| | (With the test plug as show in item | 0.2kgf ~ 2kgf | | |
| | G) | Withdrawal force | | |
| | | 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

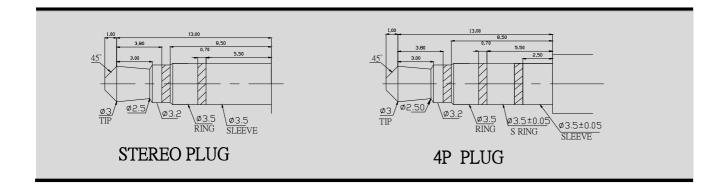
| ITEM | TEST CONDITIONS |
|---------------|---|
| (E1)Life test | The life test shall consist of 5,000 cycles of insertion and withdrawal with test plug(Show in item G), at a rate of 20 to 30 cycles per minute under no load . |

| (E2)Soldering test | The terminal of JACK tested shall be dipped into soldering flux or equivalent for 5 \sim 10 seconds and then immersed into molten solder Sn at 260 \pm 5°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 ± 5°C Dip time : 5 ± 1 seconds . |
| (E4) Hand Soldering Temperature | Temperature of solder: 350 ± 10℃ Dip time: 3 ± 0.5 seconds. |

F) Temperature graph

| ITEM | TEST CONDITIONS |
|-----------------------------------|---|
| The temperature peak withoutlead. | Pre-heating temperature is 25 ~ 150°C, for a duration about 250 seconds. The peak temperature is 260°C, the duration for 10 seconds. |

G) . MATED PLUG



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