ISO 9001 : 2000 TÜV CERT Cert.No.:0410020138

# SPECIFICATION

**PART NO.** 101110FTAC0M430ZA

**DESCRIPTION.** RJ45 1X1 TAB DOWN W/O LED & TRANSFORMER

**CUSTOMER.** _____

**REV. :** P0 **REV. DATE :** 2006 / Aug / 17

| | APPROVED | CHECKED | PREPARED |
|---|---|---|---|
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# 實盈股份有限公司

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# SUYIN CORPORATION
# SPECIFICATION

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## 1 P/N SPECIFICATION

SUYIN P/N: **101 110 F** **T** **AC** **0** **M4** **30** **ZA**
A B C D E

A. Transformer Speed: 10/100/1000 Base-T
LED Polarity: W/O

B. Schematic: Refers to section 5.1

C. LED Color Code:

| w/o LED: 0 | | RIGHT LED | | | | | |
|---|---|---|---|---|---|---|---|
| | | YELLOW | GREEN | ORANGE | G/O | G/Y | O/G |
| LEFT LED | YELLOW | 1 | 7 | D | K | N | R |
| | GREEN | 2 | 8 | E | L | P | S |
| | ORANGE | 3 | 9 | F | M | Q | T |
| | G/O | 4 | A | G | | | |
| | G/Y | 5 | B | H | | | |
| | O/G | 6 | C | J | | | |

D. RJ Contact Plating:

M2: Gold Flash selected Gold plating over 50 u" min. Nickel
M3: 10u" selected Gold plating over 50 u" min. Nickel
M4: 15u" selected Gold plating over 50 u" min. Nickel
M5: 30u" selected Gold plating over 50 u" min. Nickel
M6: 50u" selected Gold plating over 50 u" min. Nickel.

E. Mechanical Series: Refers to section 2.1~2.2

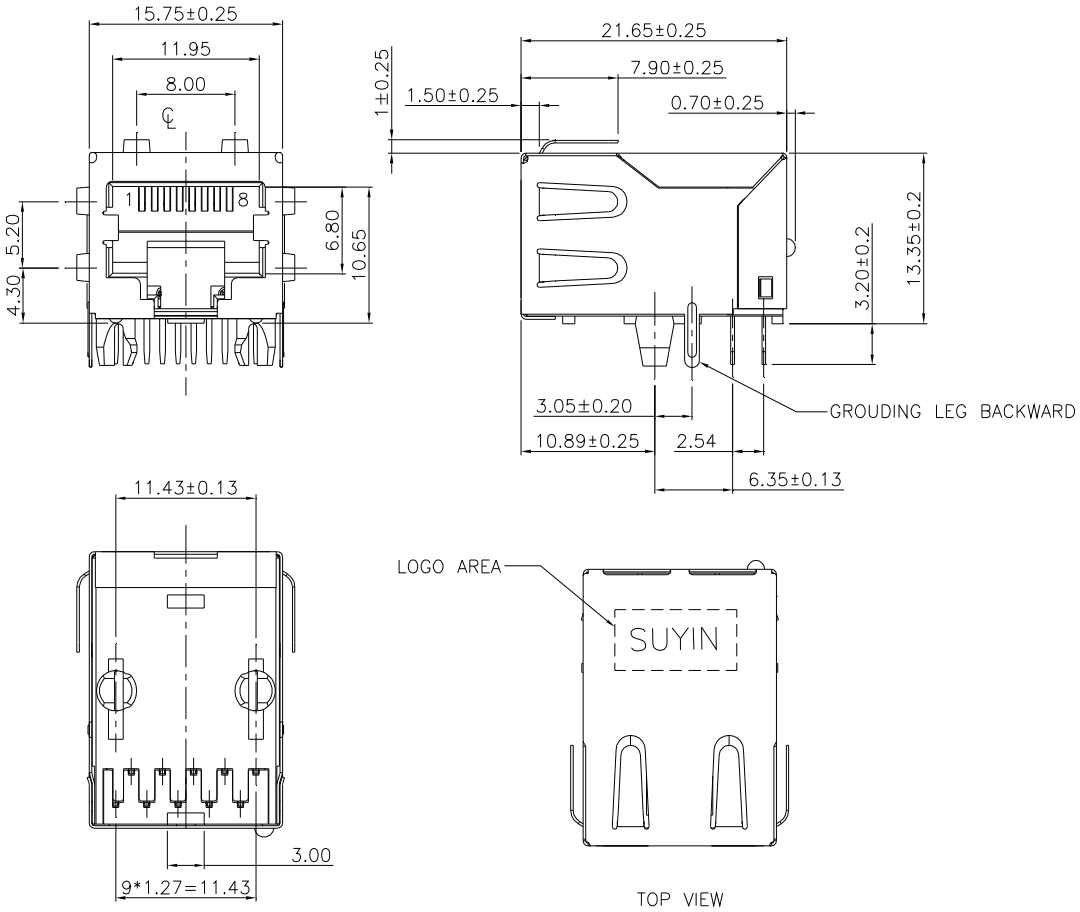
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## 2 MECHANICAL DIMENSIONS

2-1 Dimensions



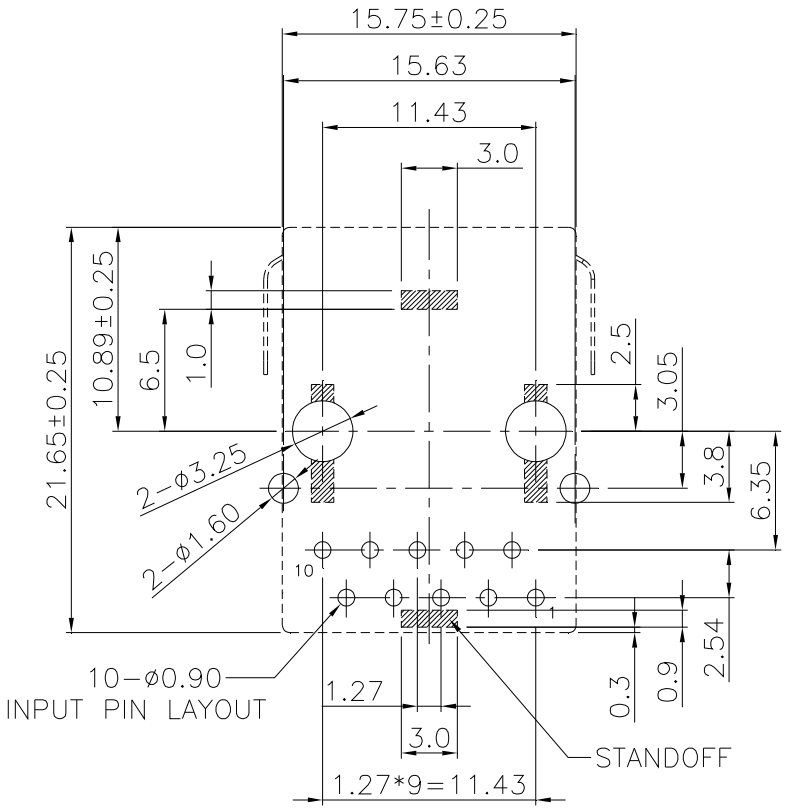

General Tolerance : 0~10mm: ±0.10
10~30mm: ±0.20
30~ mm: ±0.30

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2-2 PCB Layout



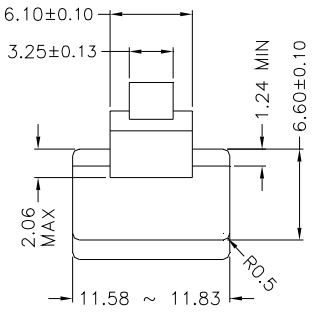

RECOMMENDED PCB LAYOUT
COMPONENT SIDE
ALL DIMENSION TOLERANCE ARE ±0.05mm

# SUYIN CORPORATION

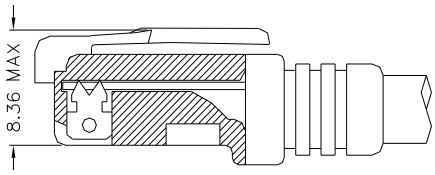
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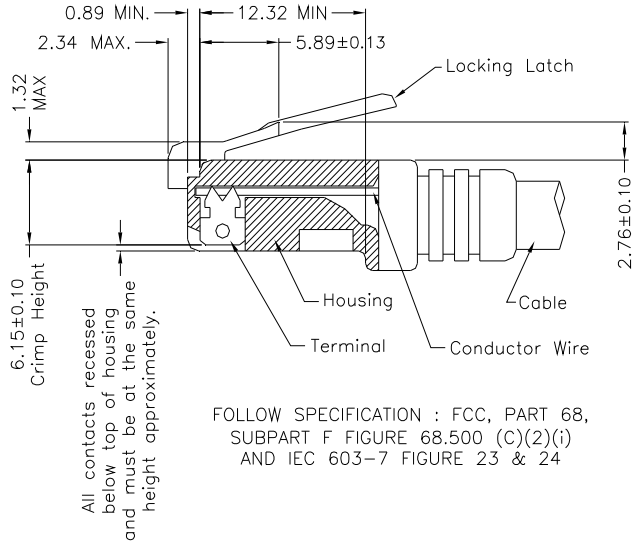
## 3 RECOMMEND RJ PLUG SPECIFICATION




* There must be no damage to housing or locking latch.There must be no nicks or cuts in cable.
* Durability : 750 cycles generally




FOLLOW SPECIFICATION : FCC, PART 68, SUBPART F FIGURE 68.500 (C)(2)(ii)




FOLLOW SPECIFICATION : FCC, PART 68, SUBPART F FIGURE 68.500 (C)(2)(i) AND IEC 603-7 FIGURE 23 & 24

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## 4 MATERIAL SPECIFICATION

4-1 RoHS Compliance per EU Directive 2002/95/EC

4-2 Plastic Housings:

A. Housings: Nylon9T, UL 94V-0, Black

4-3 Terminals:

A. RJ Contacts: Phosphor Bronze
B. RJ Solder Pins: Brass
C. Transformer Housing Solder Pins: Brass

4-4 Shields:

A. Shield: Stainless Steel

4-5 Plating:

A. RJ Contacts: As P/N specified
B. RJ Solder Pins: 100u" min. Matte Tin over 50u" Nickel under-plating
C. Transformer Housing Solder Pins: 100u" min. Matte Tin over 50u" Nickel under-plating
D. Shield Grounding Legs: Pre-soldering, Sn/ Ag/ Cu ( 96.5/ 3/ 0.5 )

4-6 PCB: FR-4, Two Layer PCB

4-7 Internal Solder Joints: Sn/ Ag/ Cu ( 96.5/ 3/ 0.5 )

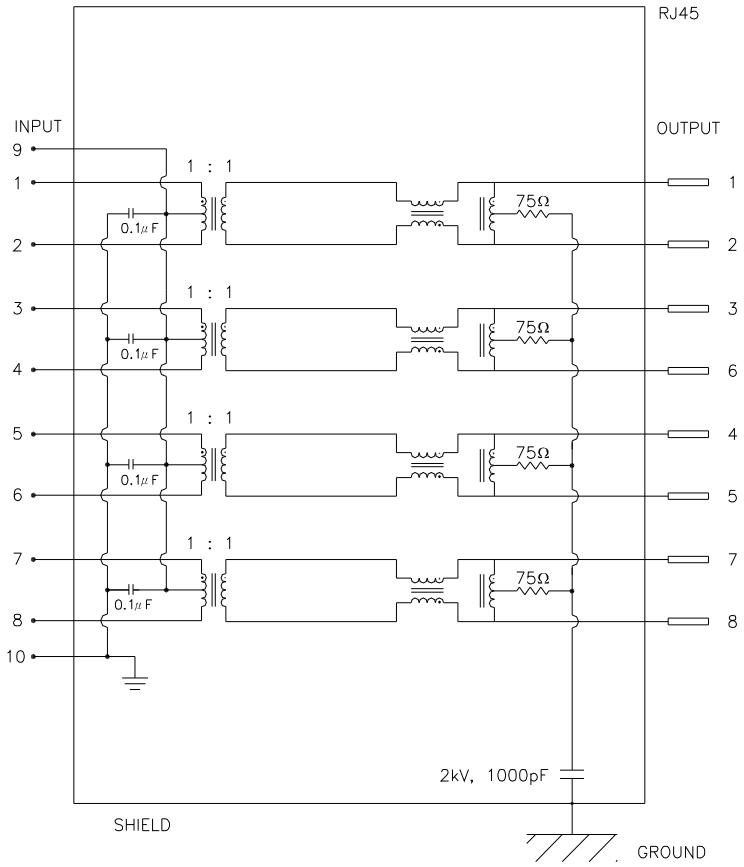
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## 5 ELECTRICAL CHARACTERISTICS

5-1 Schematic



5-2 Transmitter & Receiver Filter:

| Insertion Loss (dB MAX) | Return Loss at 100Ω (dB MIN) | | | |
|---|---|---|---|---|
| 1~125MHz | 1~30MHz | 30~60MHz | 60~80MHz | 80~100MHz |
| -1.2 | -18 | -16 | -12 | -10 |

5-3 Common Mode Rejection @ 1~100 MHz: -30dB MIN

5-4 Cross Talk @ 1~100 MHz: -25dB MIN

5-5 Inductance @ 100KHz/ 0.1V, 8mA DC BIAS: 350μH MIN

5-6 HiPot Test: 1500Vrms, 60sec

## 6 OPERATING & TEST REQUIRMENTS

Product is designed to meet electrical, mechanical and environmental performance requirements specified below. All tests are performed at ambient environmental conditions per MIL-STD-1344A and EIA-364 unless otherwise specified

6-1 Operating Temperature Range: 0℃ TO +70℃

6-2 Storage Temperature: -40℃ to 85℃

6-3 Ratings:

1. Insulation Resistance: 500M Ohm (MIN)
2. Dielectric Withstanding Voltage: 1000 VAC

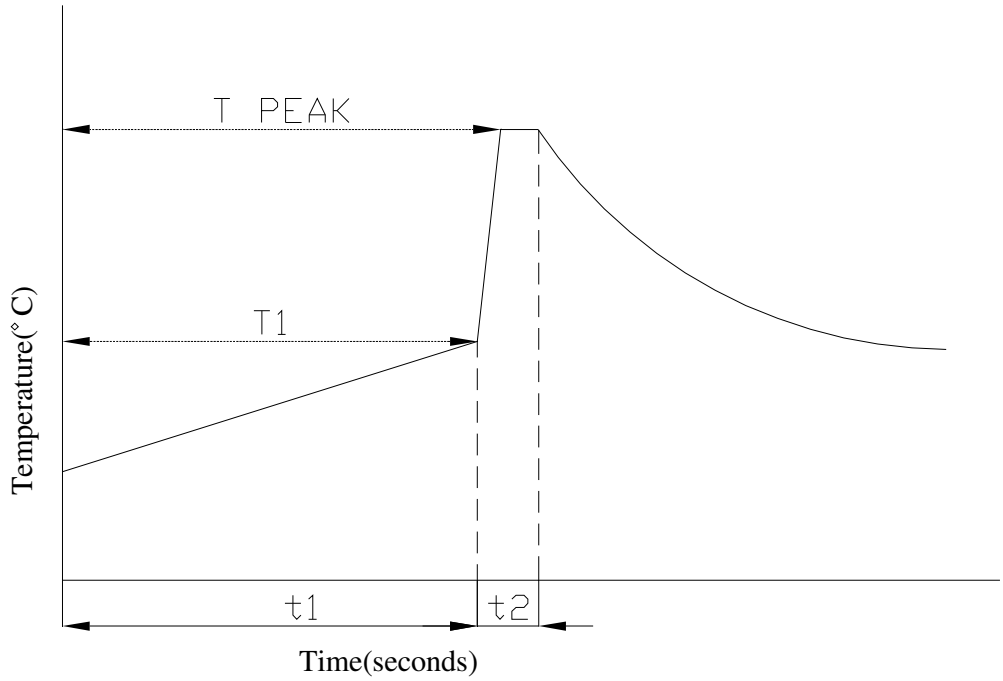
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## 7 STORAGE REQUIRMENTS

All products shall be packaged against any physical damage and corrosion during shipment or in storage.

## 8 RECOMMEND WAVE SOLDERING PROFILE




| PARAMETER | REFERENCE | LEAD FREE SPECIFICATION |
|---|---|---|
| PREHEAT TEMPERATURE GRADIENT | | +1~4℃/sec |
| PREHEAT TIME | t1 | 2~3 MIN |
| PREHEAT TEMPERATURE | T1 | >100℃ |
| SOLDER POT TEMPERATURE | T PEAK | 260℃±5℃ |
| DWELL TIME | t2 | 3.5 SEC |
| PEAK BOARD TOP TEMPERATURE | | 190℃ |
| COOLING TEMPERATURE GRADIENT | | -6℃/SEC MAX. |