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

SPECIFICATION

PART NO. 101110FD062M446ZA

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

CUSTOMER. _____

REV. : P0 **REV. DATE : 2006 / Aug / 25**

	APPROVED	CHECKED	PREPARED
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1 P/N SPECIFICATION

SUYIN P/N: **101 110 F** **D** **06** **2** **M4** **46** **ZA**
A B C D E

A. Transformer Speed: 10/100 Base-T
LED Polarity: Reverse

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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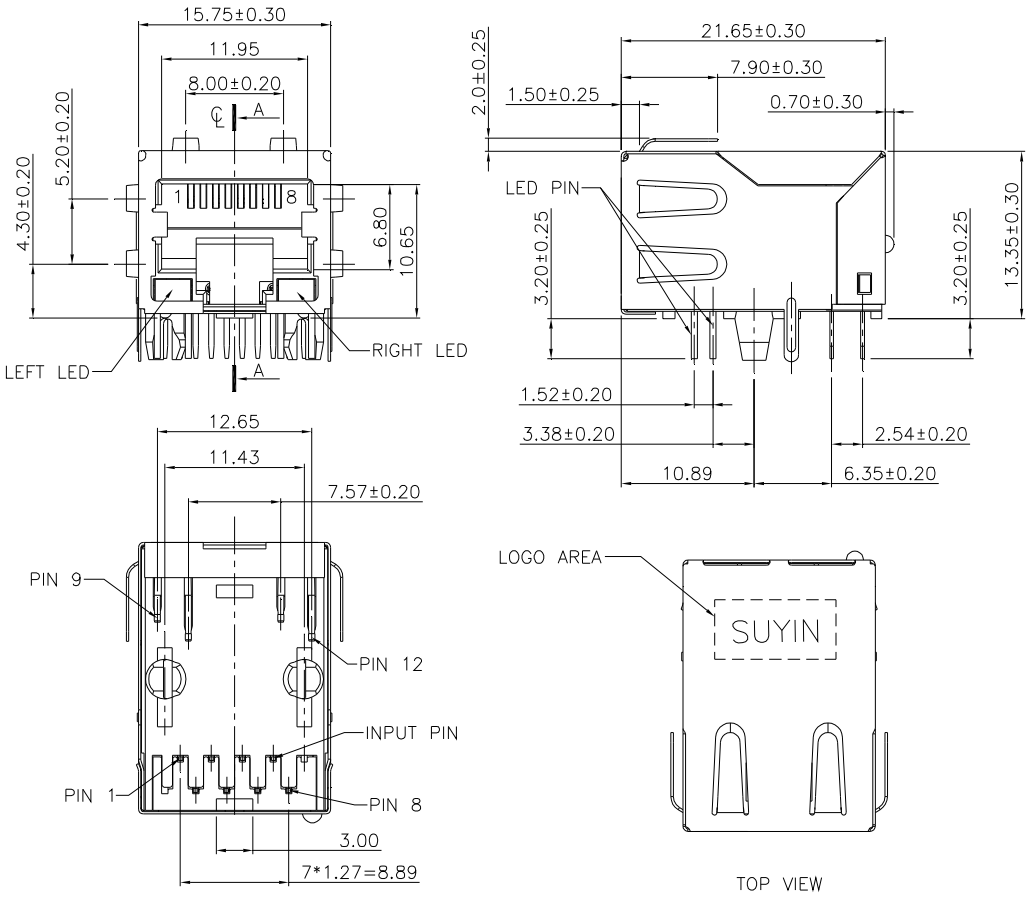
2 MECHANICAL DIMENSIONS

2-1 Dimensions



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

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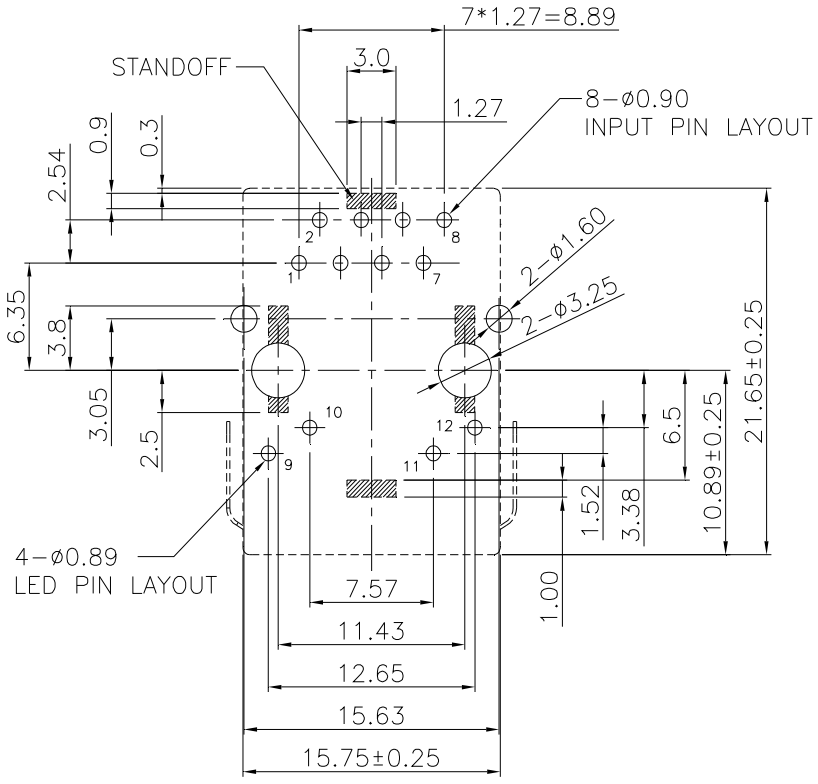
2-2 PCB Layout



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

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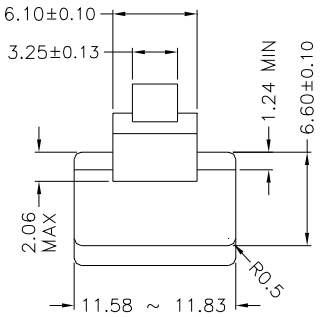
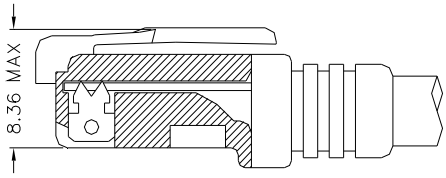
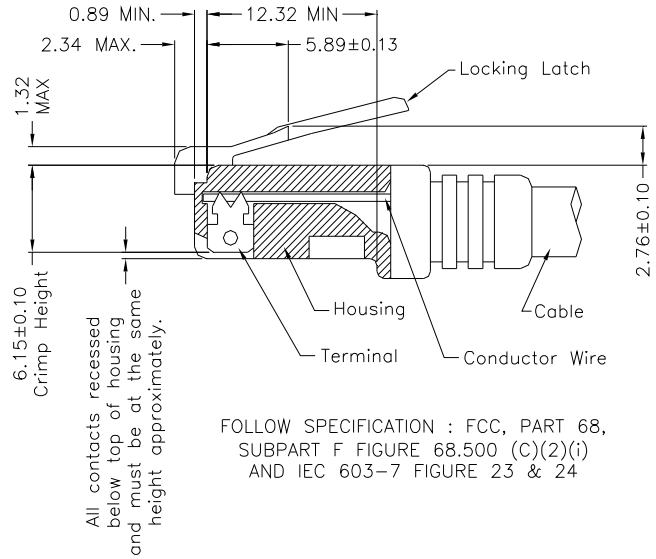
3 RECOMMEND RJ PLUG SPECIFICATION



* 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. LED Solder Pins: Brass
D. 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. LED Solder Pins: 100u" min. Tin over 50u" Nickel under-plating
D. Transformer Housing Solder Pins: 100u" min. Matte Tin over 50u" Nickel under-plating
E. 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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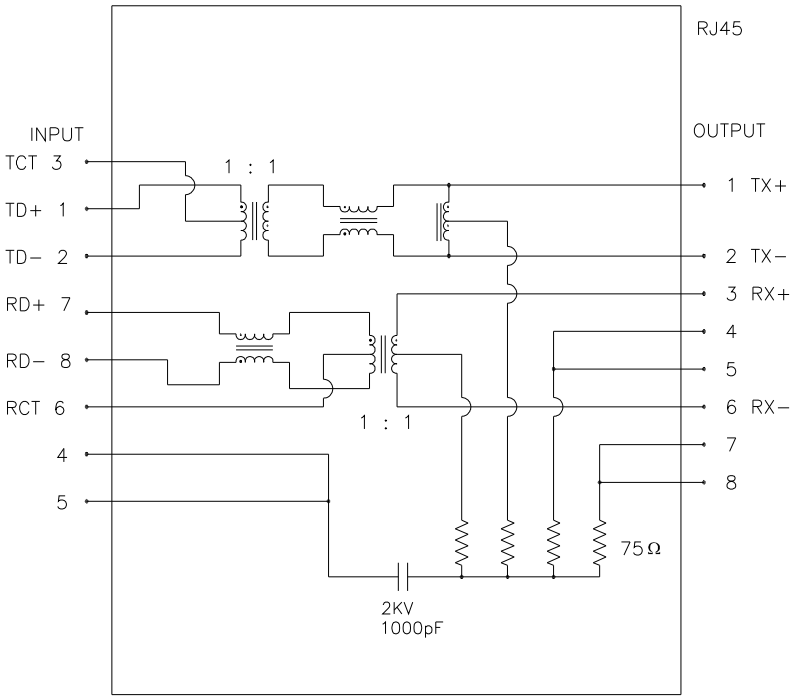
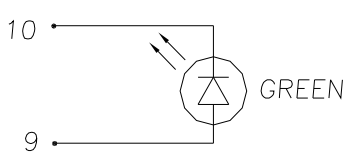
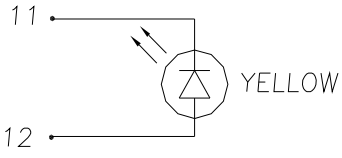
5 ELECTRICAL CHARACTERISTICS

5-1 Schematic







5-2 Transmitter & Receiver Filter:

Insertion Loss (dB MAX)	Return Loss at 100Ω (dB MIN)		
1~100MHz	1~30MHz	30~60MHz	60~80MHz
-1.0	-18	-16	-12

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

5-4 Cross Talk @ 1~100 MHz: -35dB MIN

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

5-6 HiPot Test: 1500Vrms, 60sec

5-7 LED:

Forward Voltage (V) @ 20mA	
Typical	MAX
2.2	2.6

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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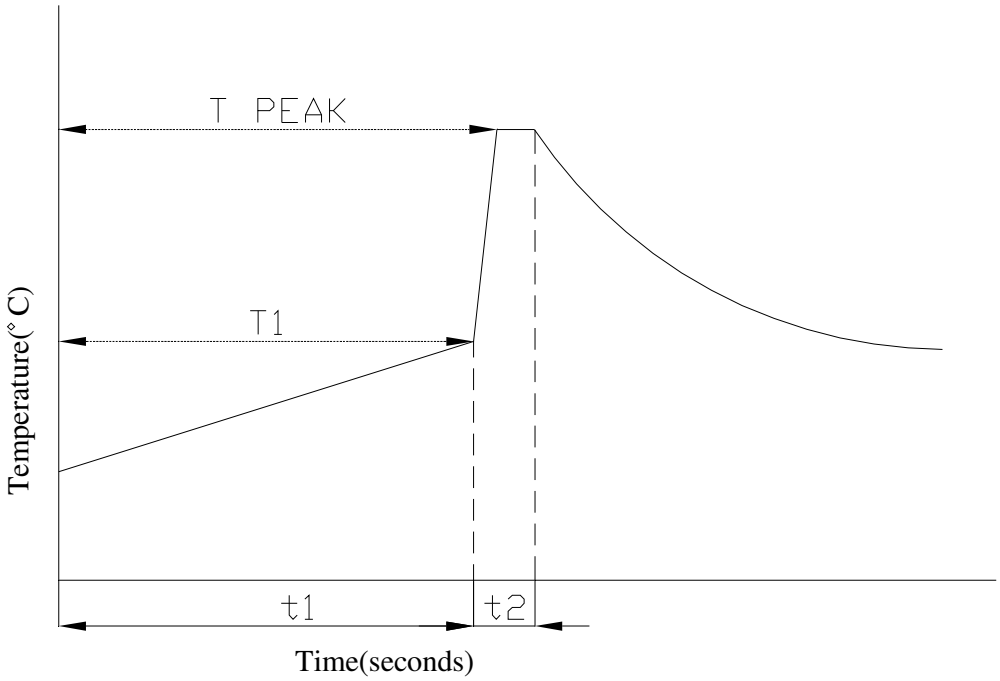
7 STORAGE REQUIRMENTS

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.