



SPECIFICATION

PART NO. 101111FHAA4M408ZA

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

CUSTOMER. _____

REV. : P0

REV. DATE : 2006 / Sep / 11

	APPROVED	CHECKED	PREPARED
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1 P/N SPECIFICATION																																																														
SUYIN P/N: 101 111 F <u>H</u> <u>AA</u> <u>4</u> <u>M4</u> <u>08</u> ZA A B C D E																																																														
A. Transformer Speed: 10/100/1000 Base-T LED Polarity: Normal																																																														
B. Schematic: Refers to section 5.1																																																														
C. LED Color Code:																																																														
<table><tr><td colspan="2">w/o LED: 0</td><td colspan="6">RIGHT LED</td></tr><tr><td colspan="2"></td><td>YELLOW</td><td>GREEN</td><td>ORANGE</td><td>G/O</td><td>G/Y</td><td>O/G</td></tr><tr><td rowspan="6">LEFT LED</td><td>YELLOW</td><td>1</td><td>7</td><td>D</td><td>K</td><td>N</td><td>R</td></tr><tr><td>GREEN</td><td>2</td><td>8</td><td>E</td><td>L</td><td>P</td><td>S</td></tr><tr><td>ORANGE</td><td>3</td><td>9</td><td>F</td><td>M</td><td>Q</td><td>T</td></tr><tr><td>G/O</td><td>4</td><td>A</td><td>G</td><td></td><td></td><td></td></tr><tr><td>G/Y</td><td>5</td><td>B</td><td>H</td><td></td><td></td><td></td></tr><tr><td>O/G</td><td>6</td><td>C</td><td>J</td><td></td><td></td><td></td></tr></table>		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					
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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																																																														

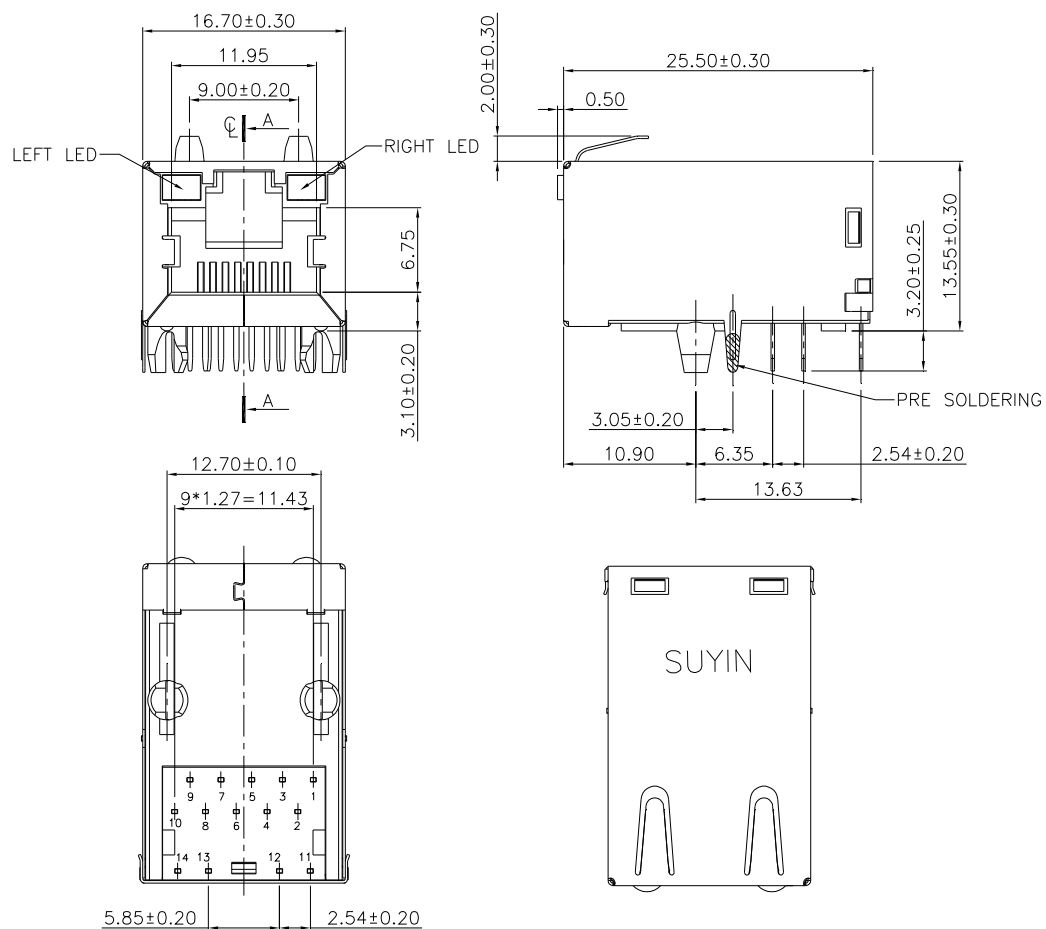
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2 MECHANICAL DIMENSIONS

2-1 Dimensions



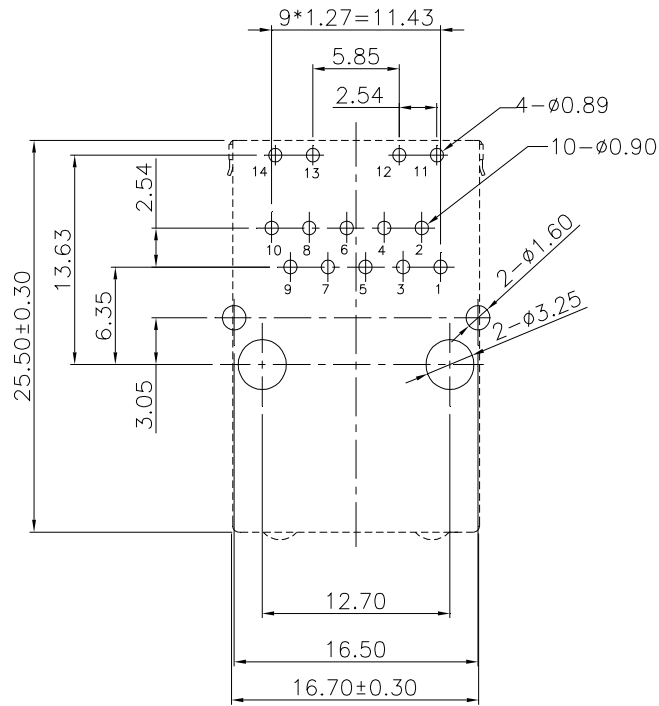
General Tolerance : 0~10mm: ± 0.10
 10~30mm: ± 0.20
 30~ mm: ± 0.30

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2-2 PCB Layout



RECOMMENDED PCB LAYOUT
COMPONENT SIDE
ALL DIMENSION TOLERANCE ARE $\pm 0.05\text{mm}$

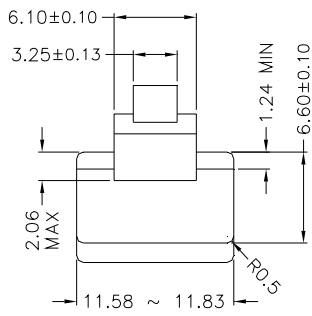
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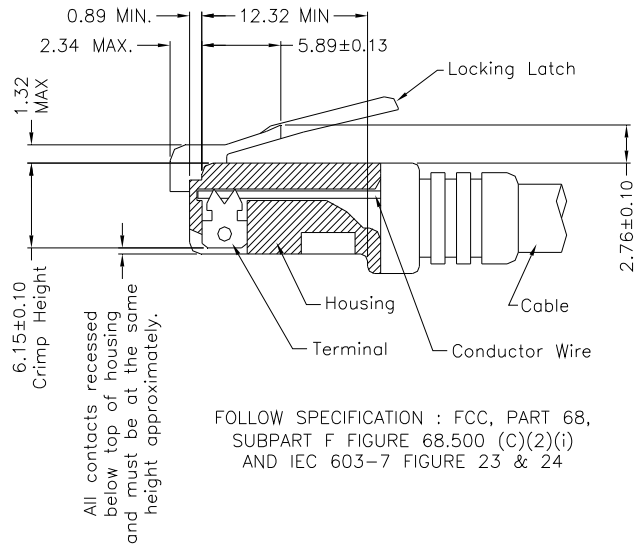
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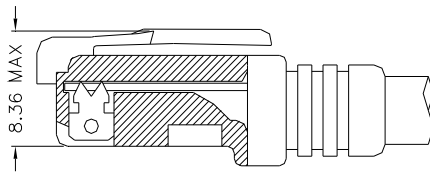
3 RECOMMEND RJ PLUG SPECIFICATION



- * 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)(i)
 AND IEC 603-7 FIGURE 23 & 24



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

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4 MATERIAL SPECIFICATION	
4-1 RoHS Compliance per EU Directive 2002/95/EC	
4-2 Plastic Housings:	
A. Main Housings: Nylon 9T , UL 94V-0, Black	
B. Transformer Housing: Nylon 9T, UL94V-0, Black	
C. Spacer: PBT, UL94V-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. MatteTin 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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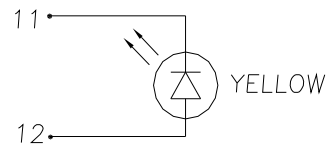
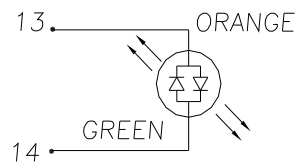
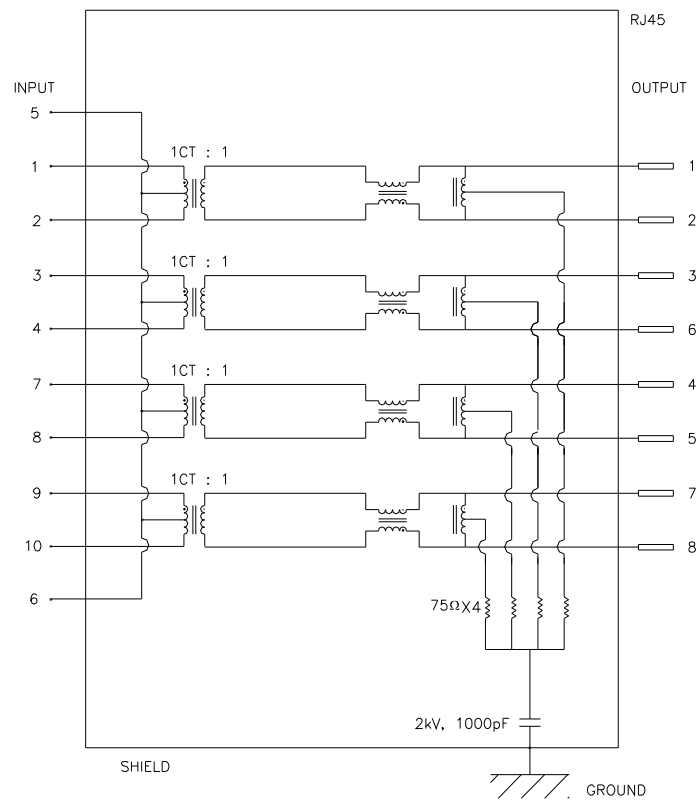
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5 ELECTRICAL CHARACTERISTICS

5-1 Schematic



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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

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°C TO +70°C

6-2 Storage Temperature: -40°C to 85°C

6-3 Ratings:

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

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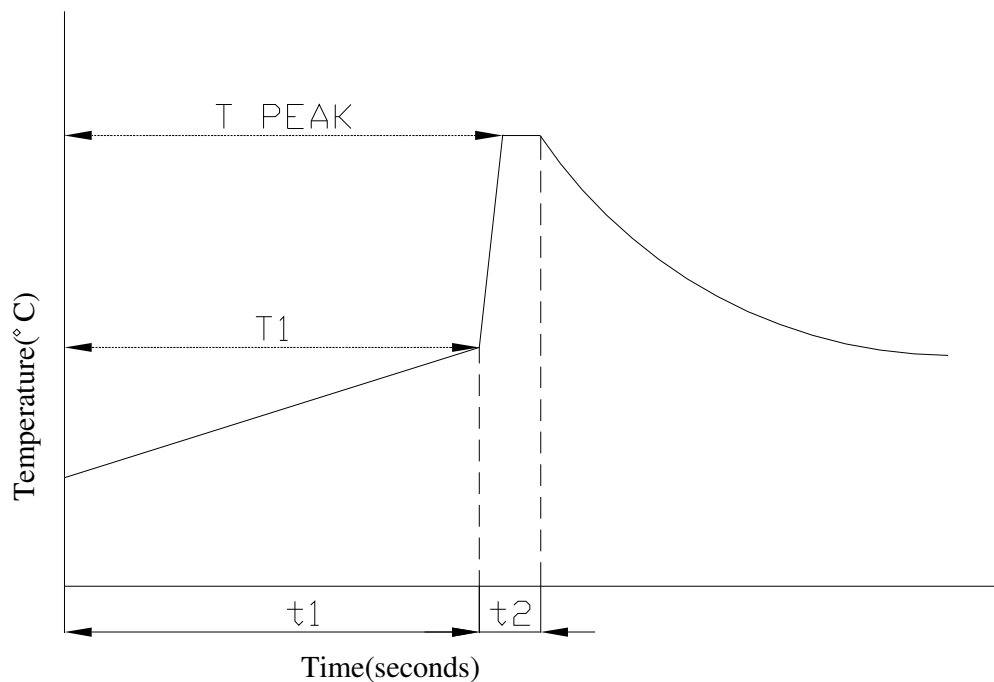
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7 STORAGE REQUIRMENTS

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°C/sec
PREHEAT TIME	t_1	2~3 MIN
PREHEAT TEMPERATURE	T_1	>100°C
SOLDER POT TEMPERATURE	T PEAK	260°C ±5°C
DWELL TIME	t_2	3.5 SEC
PEAK BOARD TOP TEMPERATURE		190°C
COOLING TEMPERATURE GRADIENT		-6°C/SEC MAX.