Ceviconn

Manufacturer/Brand：UDE

Customer P/N：

UDE P/N： RB1-125BHQ1A

Description： RJ45 1X1 Tab Down
Through Hole
10/100 Base-T
Contact Area : Gold Flash
LED:L-Green; R-Yellow
PoE

Spec No.	Update Date
RB1676-00	2011/11/3

Approved	Checked	Prepared

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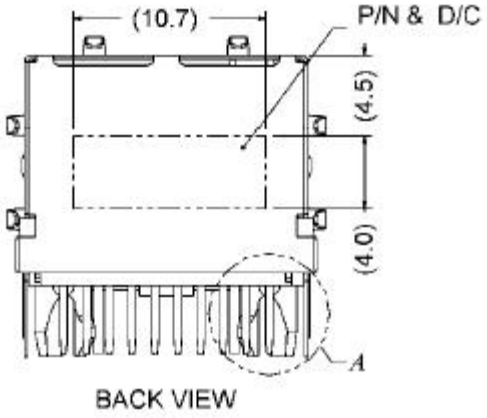
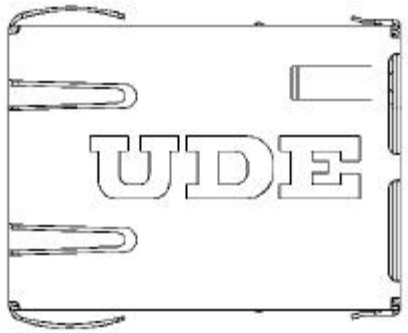
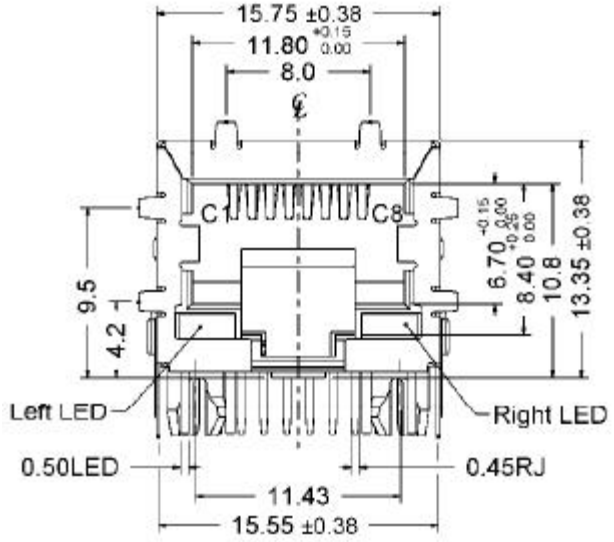
1. MECHANICAL DIMENSION

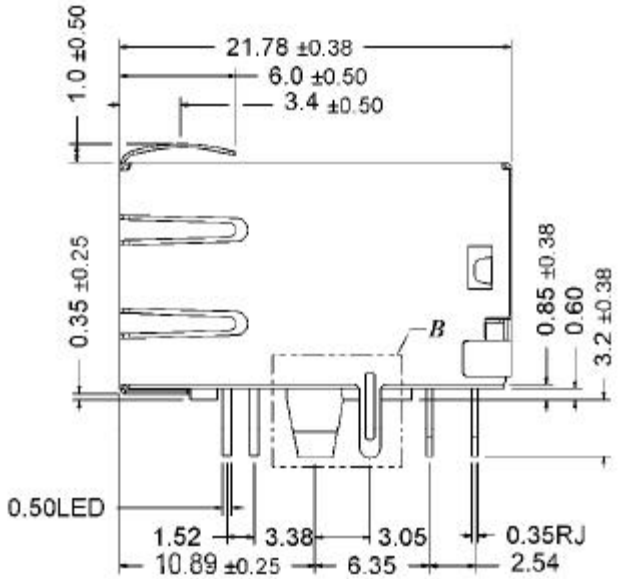
1.1 Product Dimension

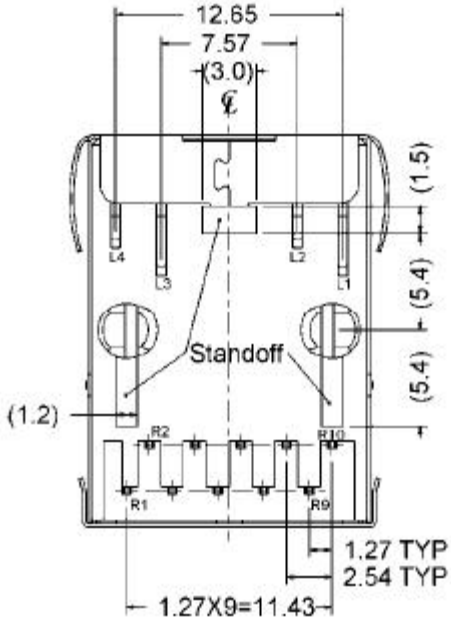
General Tolerance : X.X : ± 0.25
X.XX : ± 0.13
X.XXX : ± 0.08

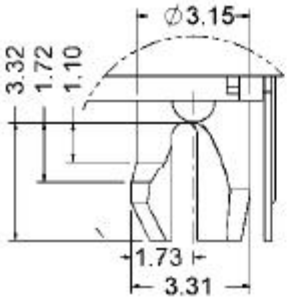




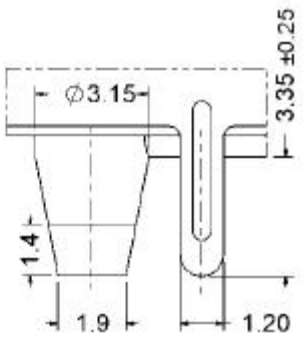








Detail A

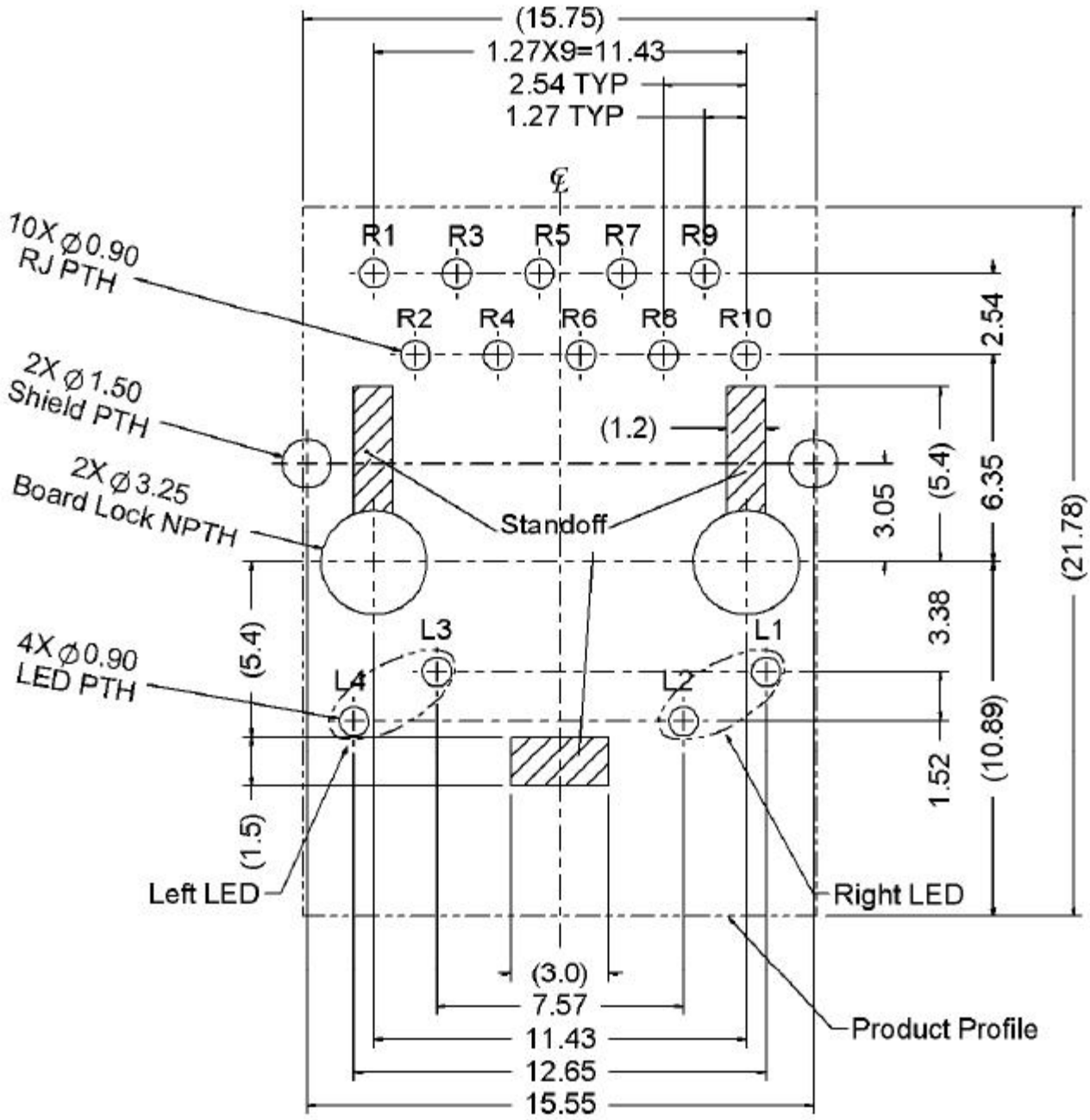


Detail B

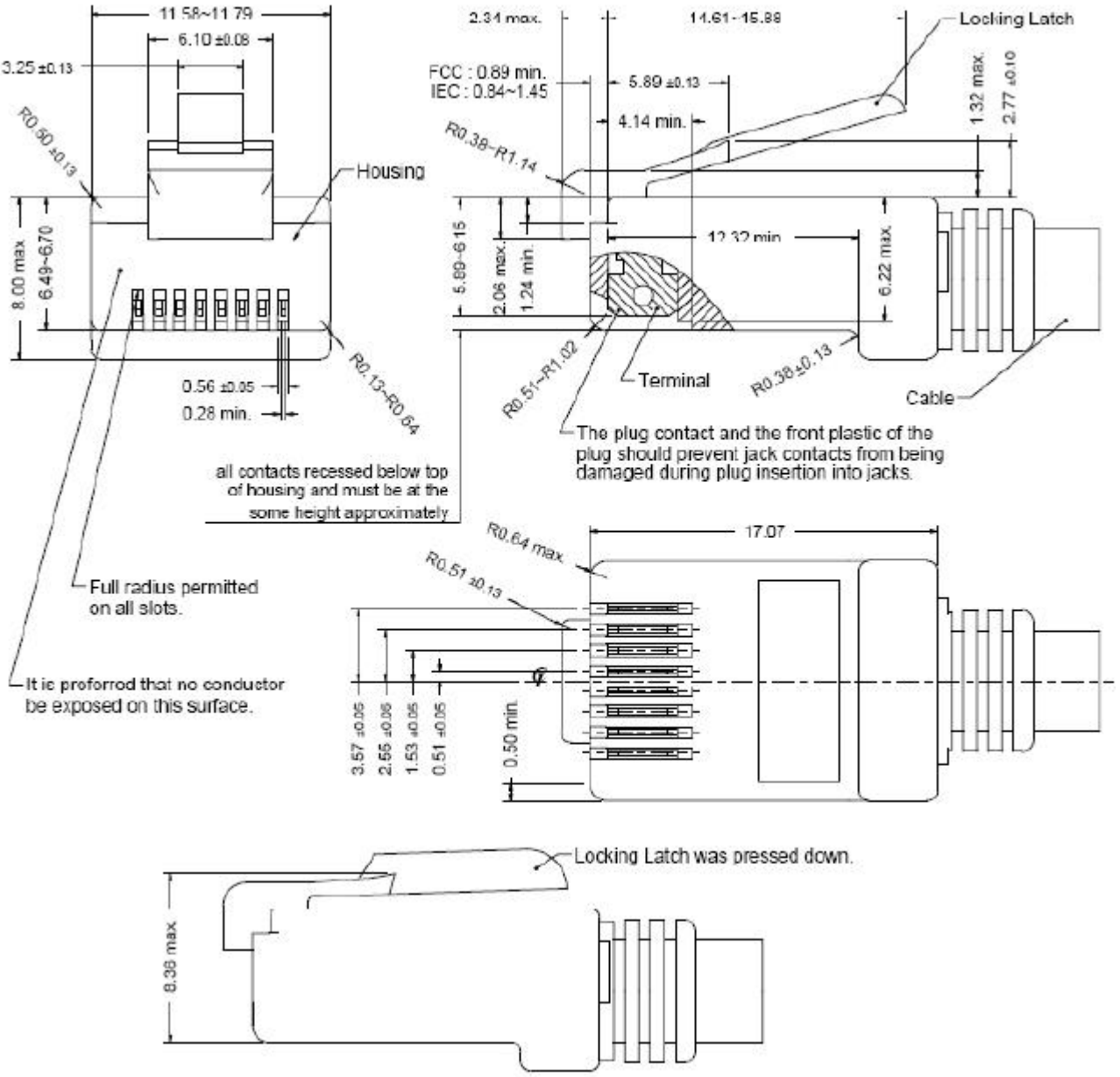
1.2 Recommened PCB Layout

Component Side of Board

All dimension tolerance are ±0.05mm unless otherwise specified



1.3 Standard RJ45 Plug Specification



- All dimensions follow :

  FCC subpart F, 68,500, Figure (C)(2)(i) & (C)(2)(ii) & (C)(3)(i)

  IEC 60603-7

- All plugs must be meeting the requirements of plug Go & No-Go gauge.

  Gauge follow : FCC subpart F, 68,500, Figure (C)(4)(i) & (C)(5)(i)

- There must be no damage to Housing and Locking Latch.

- There must be no nicks and cuts in cable.

- Durability : 750 cycles generally

2. REQUIREMENTS

2.1 Design and Construction

Product shall be of design, construction and physical dimensions specified on applicable.

2.2 Material

2.2.1 Terminal Parts (Underplating : 30μ" min. Nickel overall)

2.2.1.1 RJ Terminal : PH. Bronze, Thickness=0.30mm

Finish : Contact Area : Gold Flash

2.2.1.2 Input Terminal : Brass, Thickness=0.35mm

Finish : 100μ" min. Tin

2.2.1.3 Case Terminal : Brass, Thickness=0.30mm

Finish : 100μ" min. Tin

2.2.2 Plastic Parts <UL94V-0>

2.2.2.1 Housing : High Temperature Thermoplastic, Black

2.2.2.2 Case : High Temperature Thermoplastic, Black

2.2.3 Shield Parts : Stainless, Thickness=0.20mm, Pre-soldering

2.3 Operating and Storage Temperature

Operating Temperature : 0℃ to +70℃

Storage Temperature : -40℃ to +85℃

2.4 RJ45 specifications

Insulation Resistance 500MΩ min.

Insertion force with the latch depressed 22N max

Removal force with the latch depressed 44N max

Locking Force of Plug Latch : 50N min. @ 60+/-5 sec

Durability : 750 cycles

2.5 Performance and Test Description

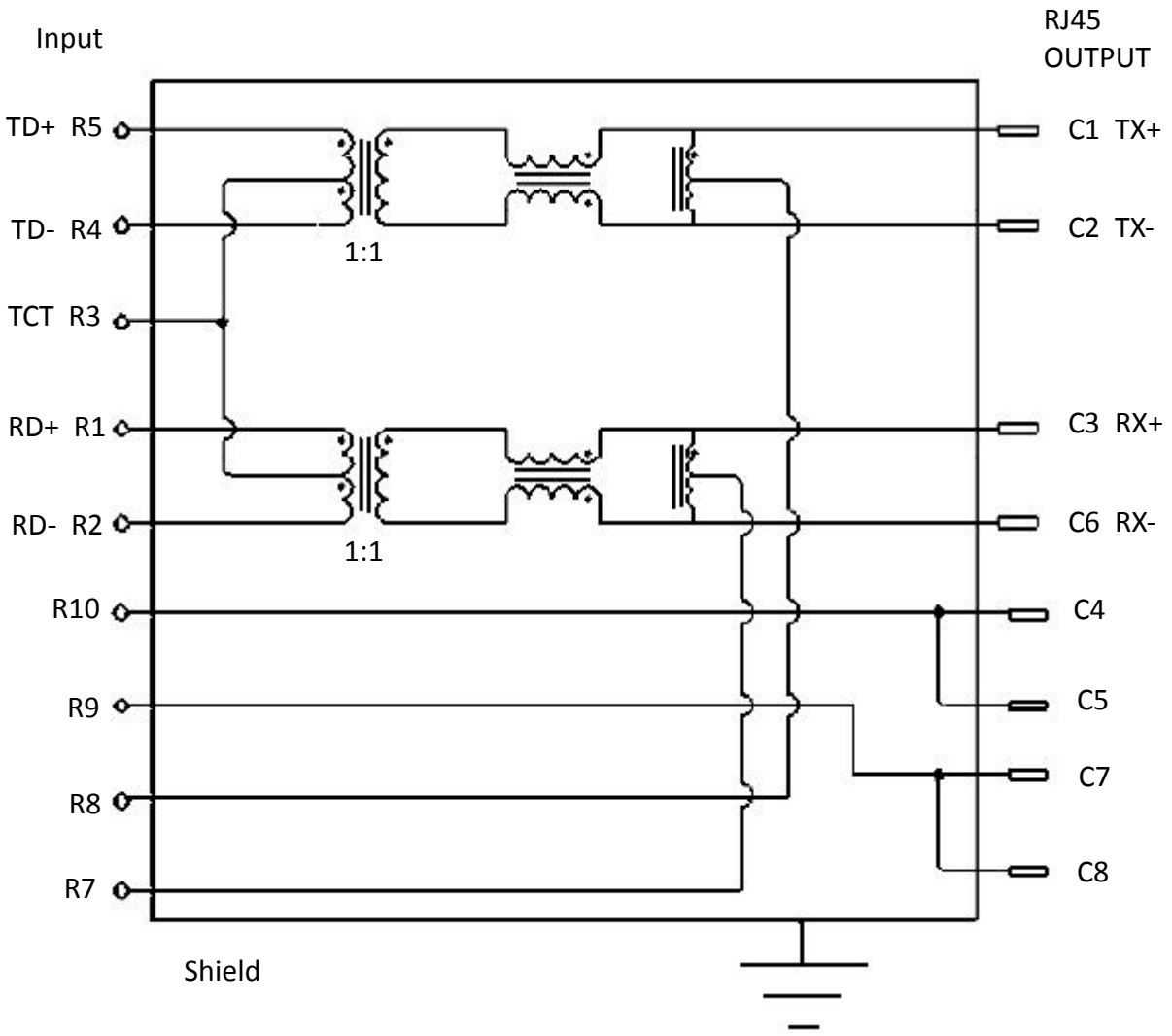
Product is designed to meet electrical, mechanical and environmental performance requirements specified in below table. All tests are performed at ambient environmental conditions per MIL-STD-1344A and EIA-364 unless otherwise specified.

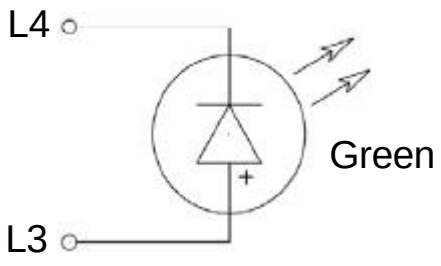
2.6 Packaging and Packing

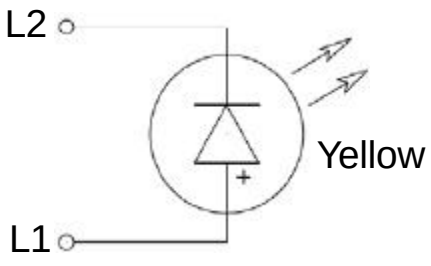
All parts shall be packaged and packed to protect against physical damage、corrosion and deterioration during shipment and storage.

3. ELECTRICAL CHARACTERISTICS

3.1 Schematic







Emitting Color	λp (nm)	Vf @If=20mA	Ir @Vr=5V
Green	565	1.7 ~2.6 V	10μA max.
Yellow	585	-1.7 ~2.6 V	10μA max.

3.2 Transmitter filter & Receiver filter

Type : Balance low pass 100Ω impedance

Insertion loss :	1~100 MHz	-1.0dB max.	
Return loss :	1~30 MHz	-18dB min.	load 100Ω
	30~60MHz	-16dB min.	load 100Ω
	60~80MHz	-12dB min.	load 100Ω

3.3 Common Mode Rejection

@ 1~100 MHz -30dB min.

3.4 Cross Talk

@ 1~100 MHz -30dB min.

3.5 Inductance @ 100KHz, 0.1V, 8mA DC BIAS

Input(R5-R4), Input(R1-R2) : 350 μH min.

3.6 HiPot Test

Input(R5-R4) To Output(C1-C2) : 1200Vac 60s

Input(R1-R2) To Output(C3-C6) : 1200Vac 60s

3.7 Balanced DC line curr

350mA MAX @57VDC continuous

500mA MAX @57VDC for 200 milliseconds

4. ORDER INFORMATION

R B 1 - 1 2 5B HQ1 A
A B C D

A. LED Code :

L-Green; R-Yellow. <Refer to Schematic of LED>

B. Mechanical Code :

w/ UDE Logo, w/ All Spring , Rear side Leg , Board Lock

C. Schematics Code :

HQ1 : HQ1 circuit

D. Plating Code :

Underplating	30μ " min. Nickel overall	
Solder Tail	100μ " min. Bright Tin	100μ " min. Matted Tin
Contact Area	**A : Gold Flash** C : 6μ " gold B : 10μ " goldld D : 15μ " gold F : 30μ " gold G : 50μ " gold	1 : Gold Flash 6 : 6μ " gold 2 : 15μ " gold 3 : 30μ " gold 4 : 50μ " gold

5. DIPPING TEMPERATURE PROFILE