APPROVAL SHEET

To：

Customer P/N：

UDE P/N： BS-R250210

Description： RJ45 1X1 Tab Up
SMT
10/100 Base-T
Contact Area : 50μ” Gold
LED:L-Green;R-Yellow

RoHS

Spec No.	Update Date
BS-0210	2011/8/19

Approved	Checked	Prepared

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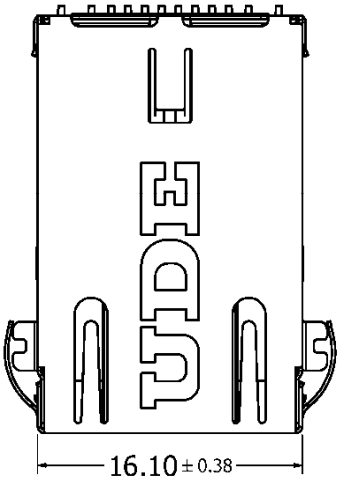
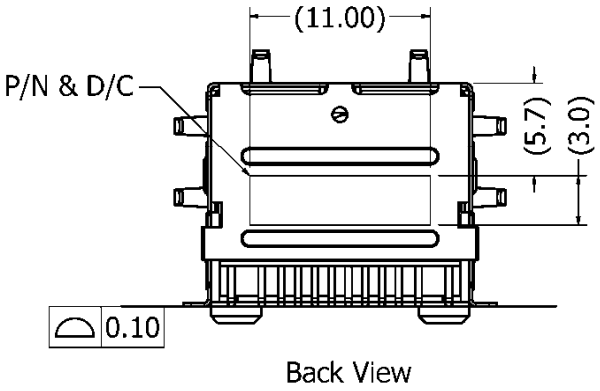
1. MECHANICAL DIMENSION

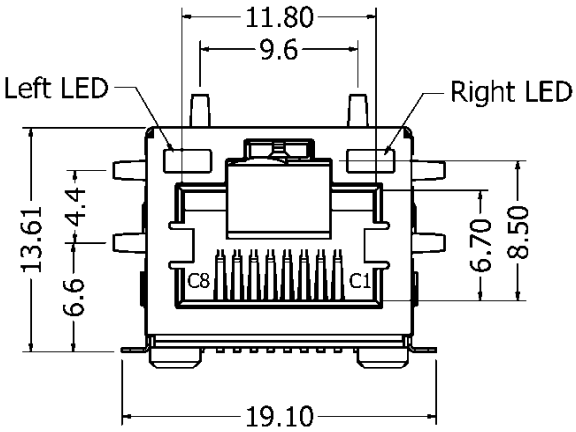
1.1 Product Dimension

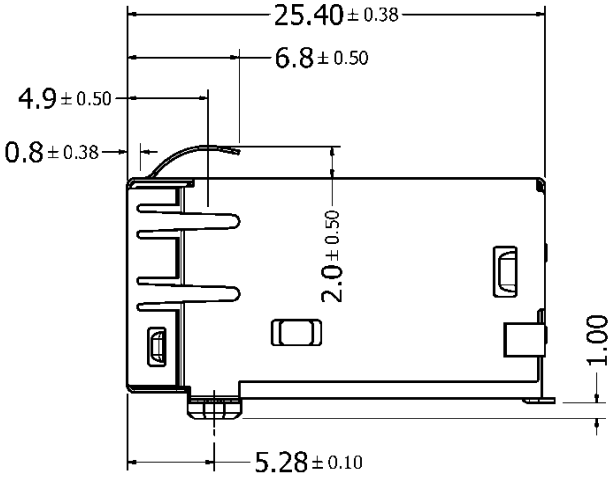
General Tolerance :	X.X : ± 0.38 X.XX : ± 0.25

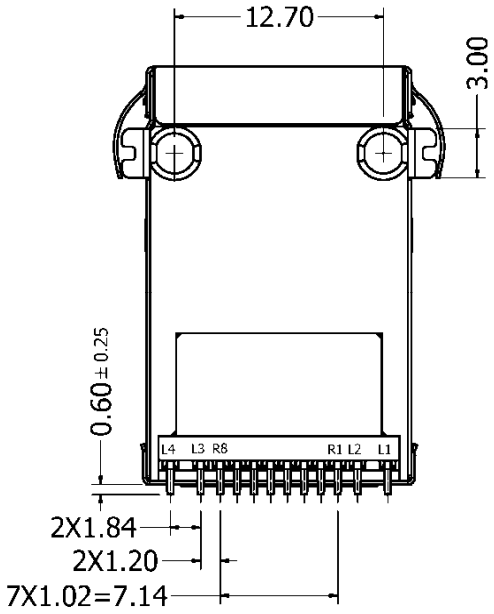




Back View



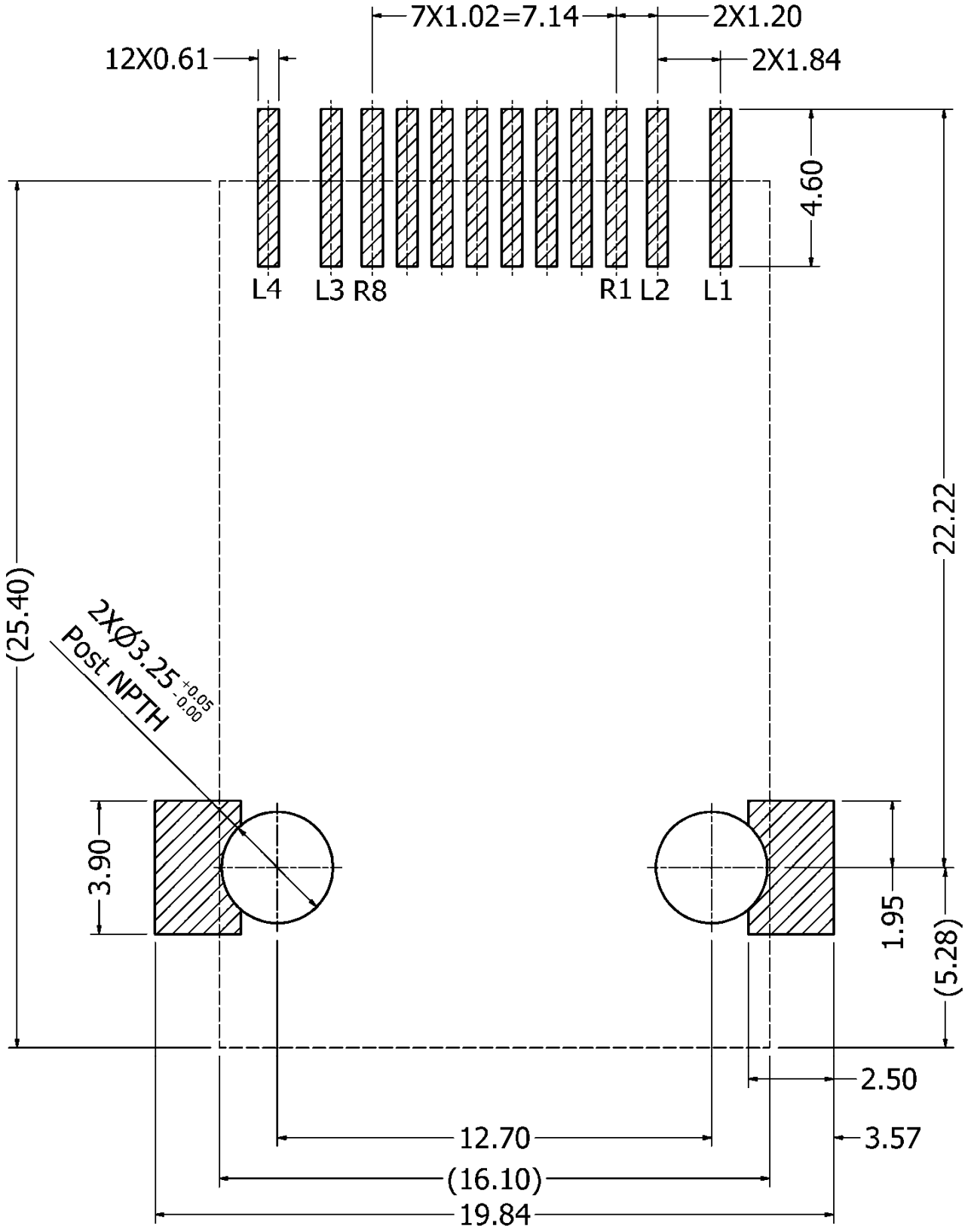




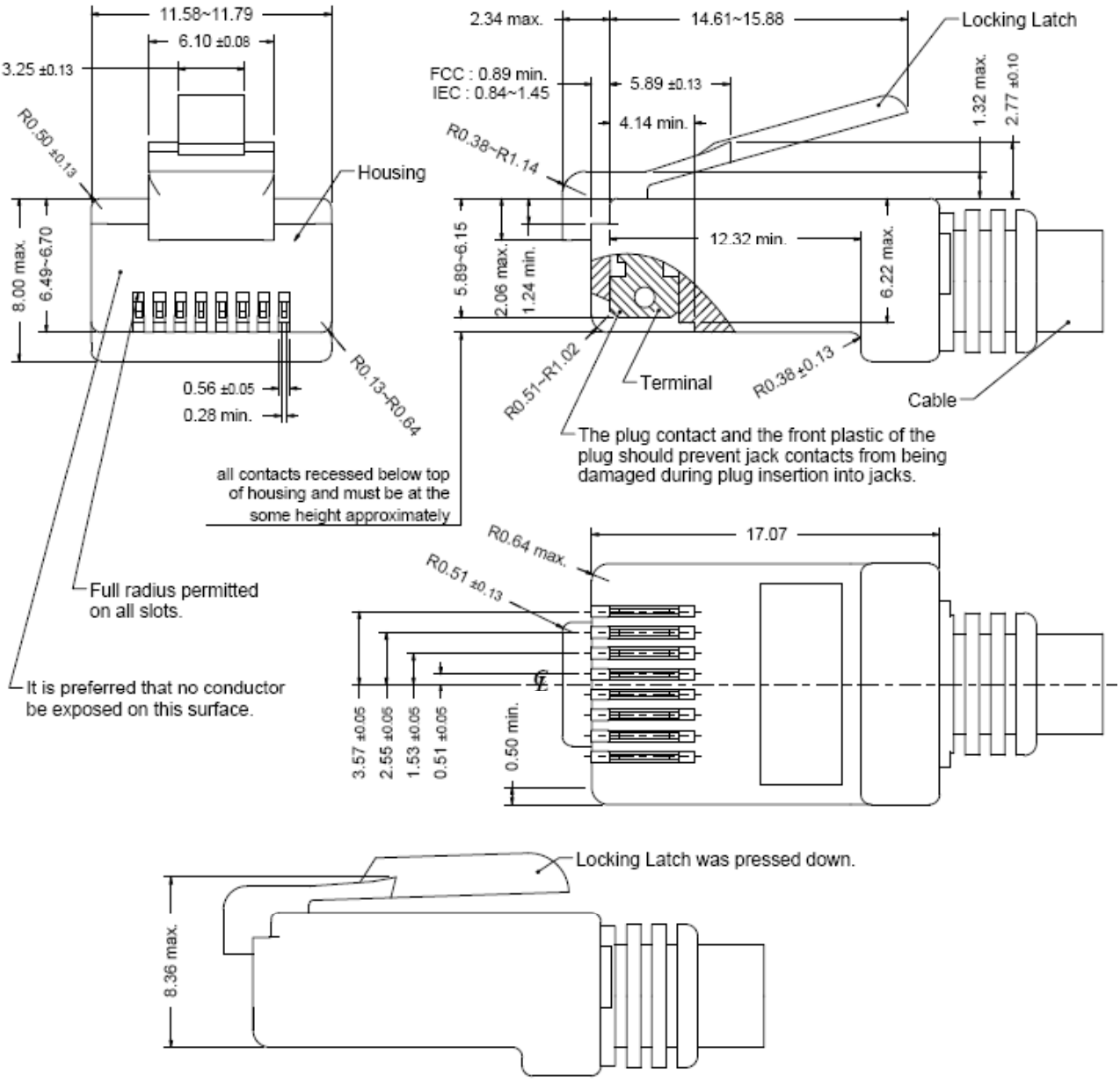
1.2 Recommened PCB Layout

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 Lctch.

- 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 : 50μ" Gold

2.2.1.2 Input Terminal : Brass, Thickness=0.25mm

Solder Tail : 100μ" min. Mt. 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

2.2.2.3 Cover: High Temperature Thermoplastic, Black

2.2.3 Shield Parts

2.2.3.1 Shield : Stainless, Thickness=0.20mm

Finish : Soldering Area : Gold Flash

2.3 Operating and Storage Temperature

Operating Temperature : -40°C to +85°C

Storage Temperature : -40°C to +85°C

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 : 2500 cycles

2.5 Performance and Test Description

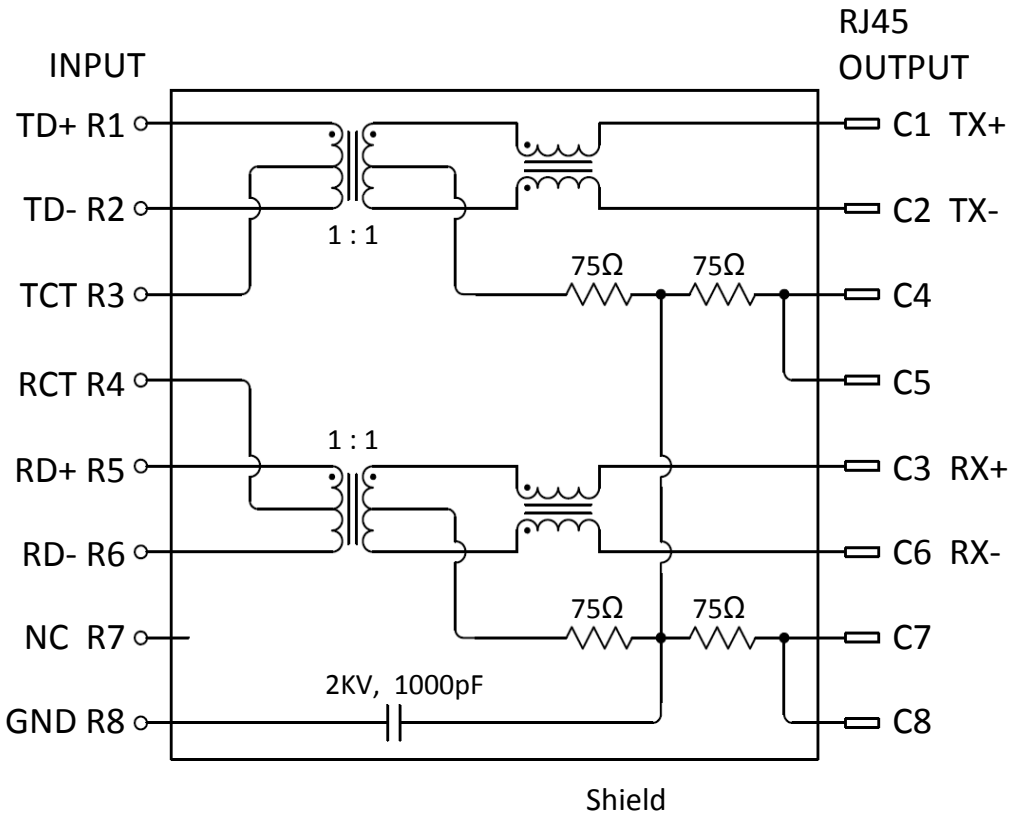
Product is designed to meet electrical, mechanical and environmental performance requirements specified in below table. All tests are performed at ambient environmental conditions per MIL-STD-1344A and EIA-364 unless otherwise specified.

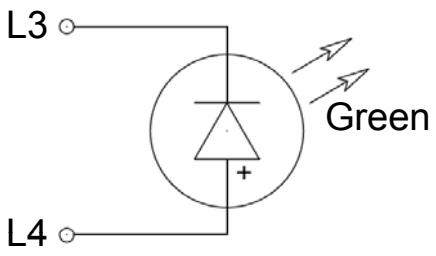
2.6 Packaging and Packing

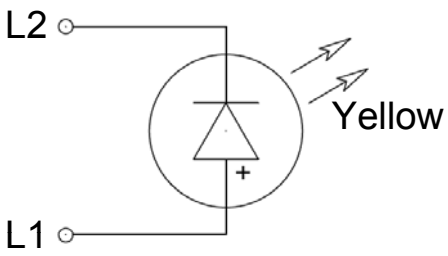
All parts shall be packaged and packed to protect against physical damage、corrosion and deterioration during shipment and storage.

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 :	1~10 MHz	-20dB min.	load 100Ω
	30MHz	-16dB min.	load 100Ω
	60~80MHz	-12dB min.	load 100Ω

3.3 Common Mode Rejection :

	1~50 MHz	-30dB min.
	50~130 MHz	-20dB min.

3.4 Cross Talk :	1~10 MHz	-40dB min.
	30~60 MHz	-35dB min.
	60~100 MHz	-30dB min.

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

Input(R1-R2), Input(R5-R6) : 350μH min.

3.6 Hi-Pot Test

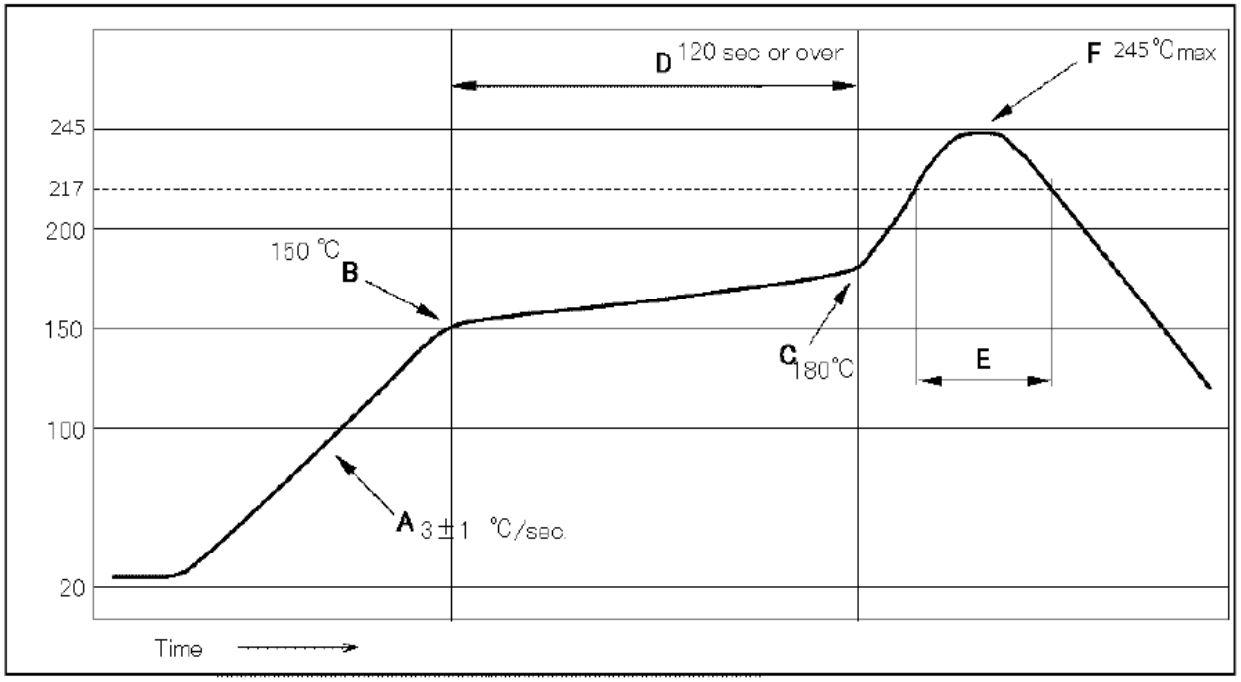
Input(R1-R2) To Output(C1-C2) : 1500Vac 60s or 2250Vdc 60s

Input(R5-R6) To Output(C3-C6) : 1500Vac 60s or 2250Vdc 60s

4. IR REFLOW TEMPERATURE PROFILE

Temperature condition of reflow soldering

Contents	Soldering Condition
A: Increasing speed	3±1 ℃/sec.
B: Pre-heat starting Temp.	150 ℃
C: Pre-heat ending Temp.	180℃
D: Pre-heat interval	120 sec or over
E: Over 217 ℃ time	60 ~ 150 sec
F: Peak Temperature	245℃max



Type of lead-free solder should be 96.5Sn-3.0Ag-0.5Cu or 99.3Sn-0.7Cu.