

# Hirose Korea B TO B Connector

## KN33-Series

### 목 차

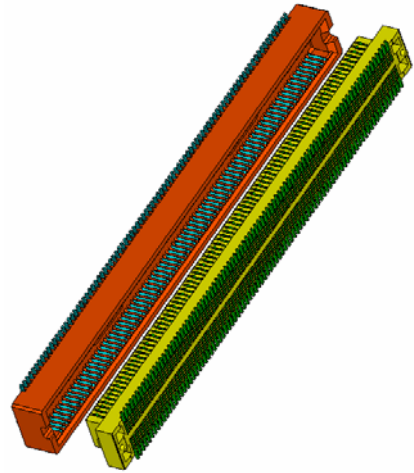
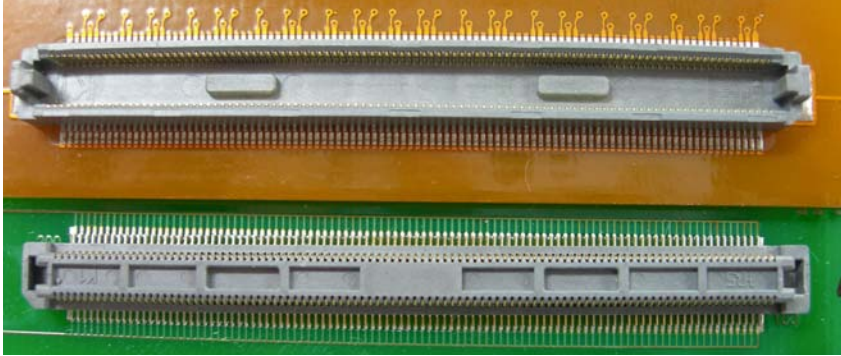
- 1. 제품 특징 -----page 2
- 2. 제품 규격 및 구성 -----page 3
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| No. | 제 품 명           | Pin 수 | 사양                   | 관련 page |
|-----|-----------------|-------|----------------------|---------|
| 1   | KN33-200DS-0.5V | 200   | 0.5PITCH, 4.5 Height | 4~5     |
| 2   | KN33-200DP-0.5V | 200   | 0.5PITCH, 4.5 Height | 4~5     |

- 4.Reflow profile (Lead-free)-----page 6

# KN33 -200DS/DP-0.5V

## 0.5mm PITCH BOARD TO BOARD CONNECTOR



### ■ 특징

#### 1. 4.5mm Low Profile

#### 2. 요홈 구조 채택에 의한 신뢰성 확보

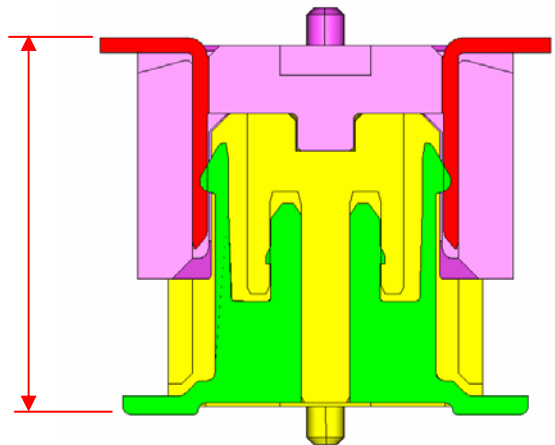
SOCKET 과 PLUG에 요홈을 두어서 충격시에 충격흡수로 접촉신뢰성이 우수.

#### 3. 자동실장시 충분한 흡착면 확보

#### 4. 충분한 유효접촉거리 확보

0.75mm의 중심축 편차에도 자동결합 가능  
Stacking Height 5.0mm의 Low Profile에서 단자간 유효접촉거리를 0.68mm확보하여 Drop시에 단락현상을 방지가능.

4.



#### 5. Click감 & 결합력 UP구조

#### 6. 좌굴 방지 구조

### ■ 용도

PDP Y-driver의 Y-Driver Board와 Glass와의 Signal전송용

## ■ 제품 규격

|        |                 |                             |                           |
|--------|-----------------|-----------------------------|---------------------------|
| Rating | Current 0.4A DC | Operating temperature range | Storage temperature range |
|        | Voltage 50V AC  | - 35 °C ~ + 85 °C           | - 10 °C ~ + 60 °C         |

| Item                     | Specification   | Conditions   |
|--------------------------|---|--|
| 1. Insulation Resistance | 500MΩ Min   | Measured at 100V DC  |
| 2. Withstand voltage     | Neither shot or insulation breakdown  | 100V AC for 1 minute   |
| 3. Contact Resistance    | 50mΩ Max  | Measured at 1mA  |
| 4. Mechanical operation  | Contact Resistance: 50mΩ MAX<br>No damage and crack 20 Times insertions and extractions | 50 Times insertions and extractions  |
| 6. Vibration             | Contact Resistance :MAX 50mΩ<br>No damage, crack and looseness.                         | Frequency 10~55HZ, at 5min, for 10CYCLES (3direction) half amplitude 0.75mm. |

## ■ 부품별 적용 원재료

| Part       | Material        | Finish | Remarks |
|------------|-----------------|--------|---------|
| DS-CASE    | LCP             | GRAY   | UL94V-0 |
| SV-CONTACT | Phosphor bronze | Ni+Au  | -       |
| DP-CASE    | LCP             | GRAY   | UL94V-0 |
| PV-CONTACT | Phosphor bronze | Ni+Au  | -       |

※ Reflow 최대 온도 250°C를 만족시킴으로 Lead-free Soldering의 요구조건에 적합한 제품이다.

## ■ Part Number의 구성

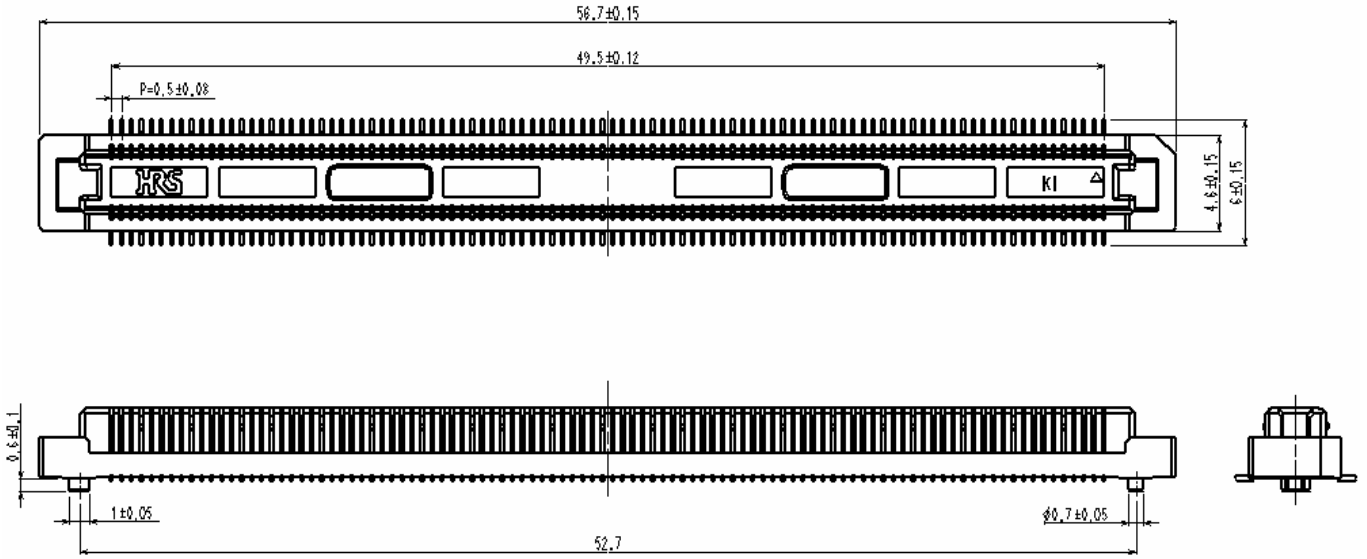
**KN33 - 200 \* - 0.5 V**

①                      ②                      ③                      ④                      ⑤

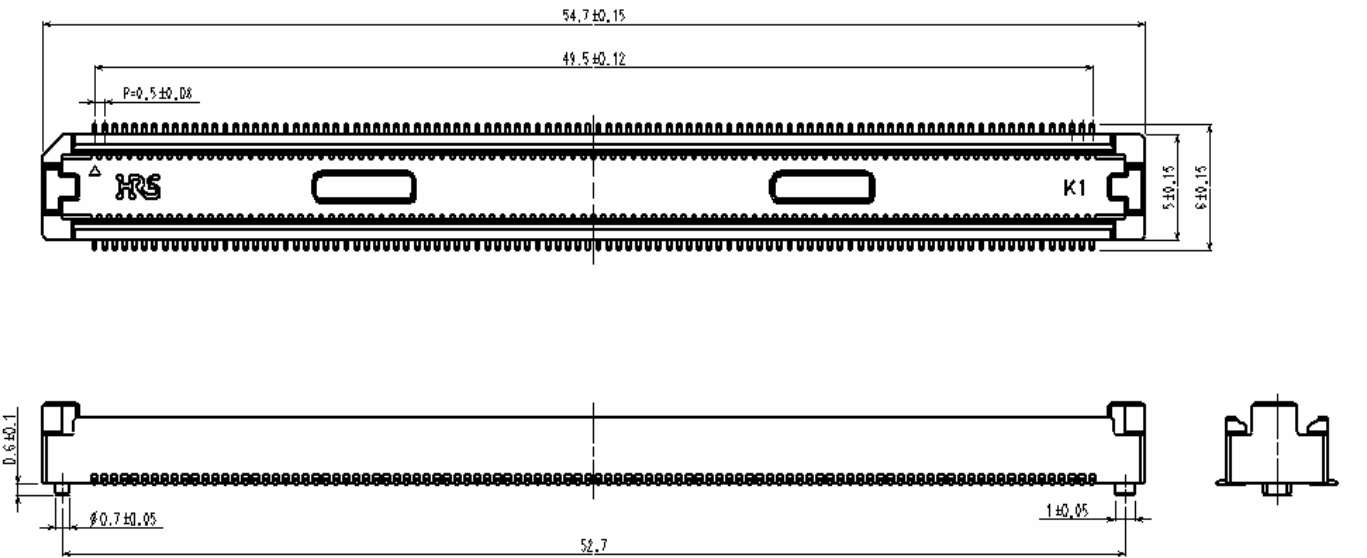
|   |               |                      |
|---|---------------|----------------------|
| ① | Serial Name   | 고유ID                 |
| ② | Contact 수     | 200 PIN              |
| ③ | Contact 분류    | DS:socket<br>DP:plug |
| ④ | Contact Pitch | 0.5mm                |
| ⑤ | Type          | Vertical             |

# ■ KN33-200DS/DP-0.5V

(1) KN33-200DS-0.5V

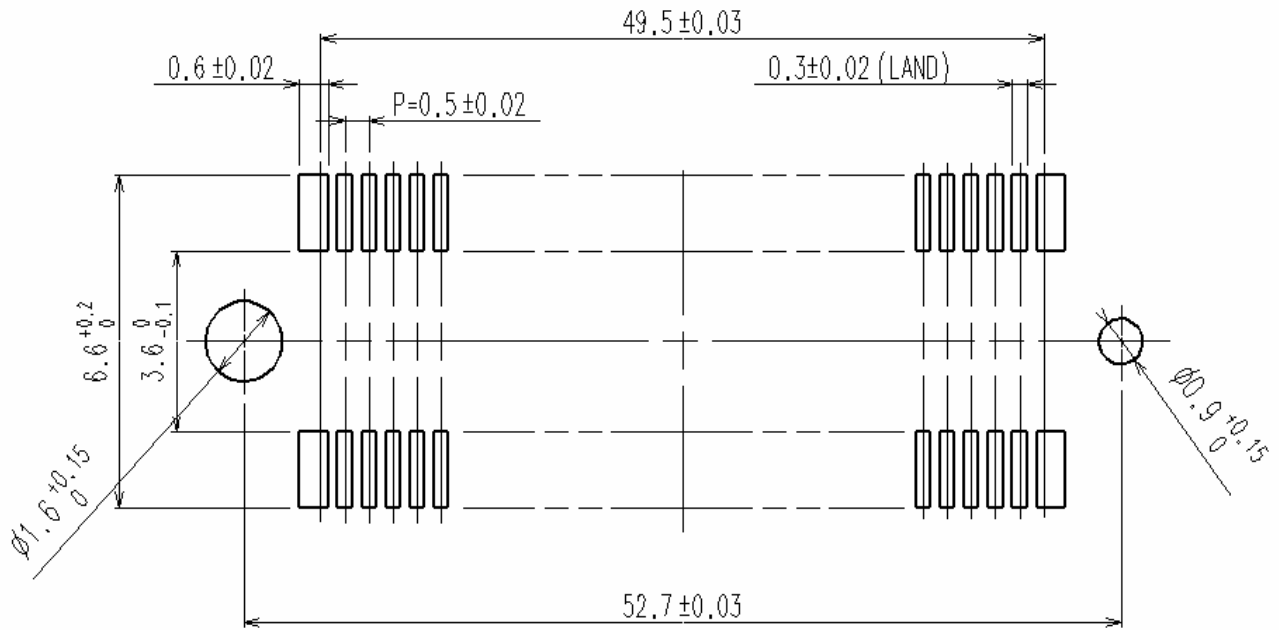


(2) KN33-200DP-0.5V

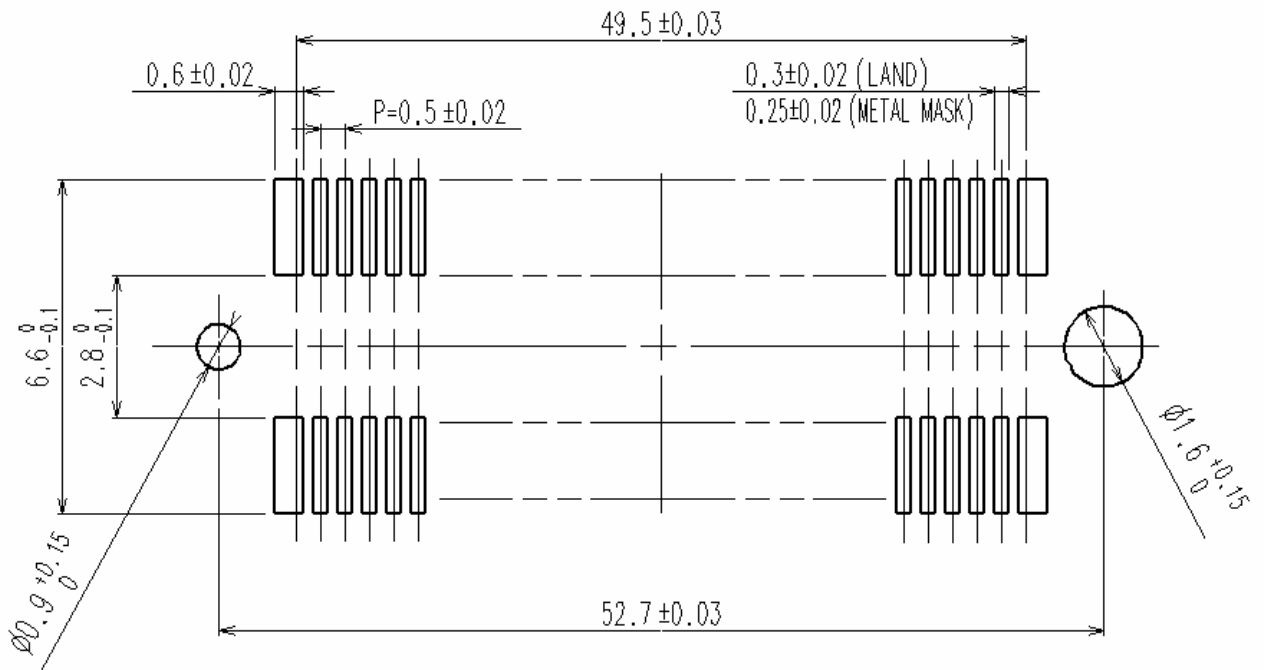


# PCB LAYOUT

(1) KN33-200DS-0.5V



(2) KN33-200DP-0.5V

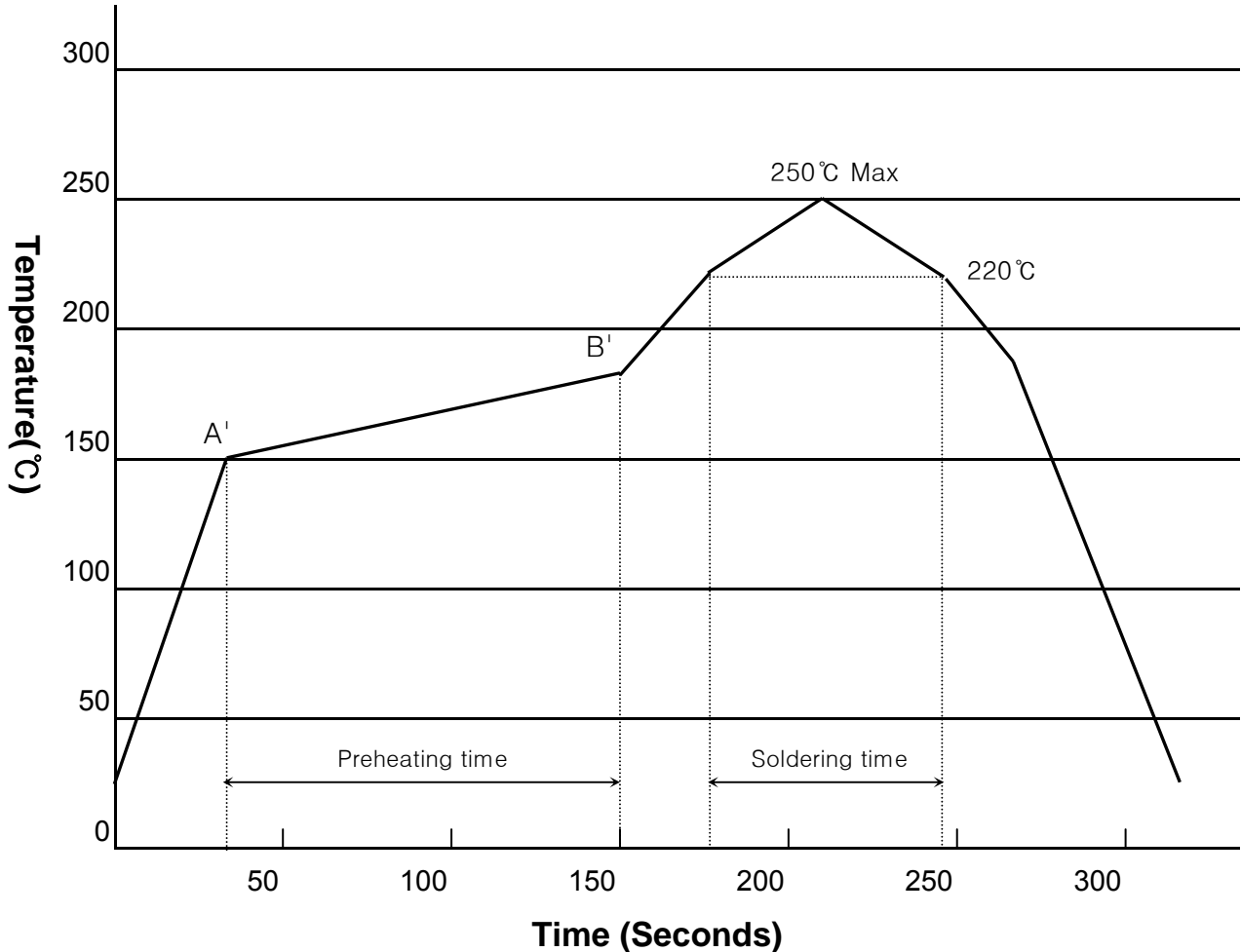


\*General Tolerance  $\pm 0.15\text{mm}$

| Product Name       | Contact | Package     | Package      |
|--------------------|---------|-------------|--------------|
| KN33-200DS/DP-0.5V | 200     | Emboss Tape | 1,000ea/Reel |

## ■ Reflow Profile

Using Lead-free Solder Paste



### Recommended Application Conditions

Reflow System: IR reflow

Solder: Cream type Sn / 3 Ag / 0.5 Cu

Flux content 11%wt

Metal mask thickness: 0.15mm

Preheating time: 150°C~190°C, 90±30seconds

A'=150°C~170°C, B'=170°C~190°C

Soldering time: 250°C Max

220°C Min, 30~60 seconds