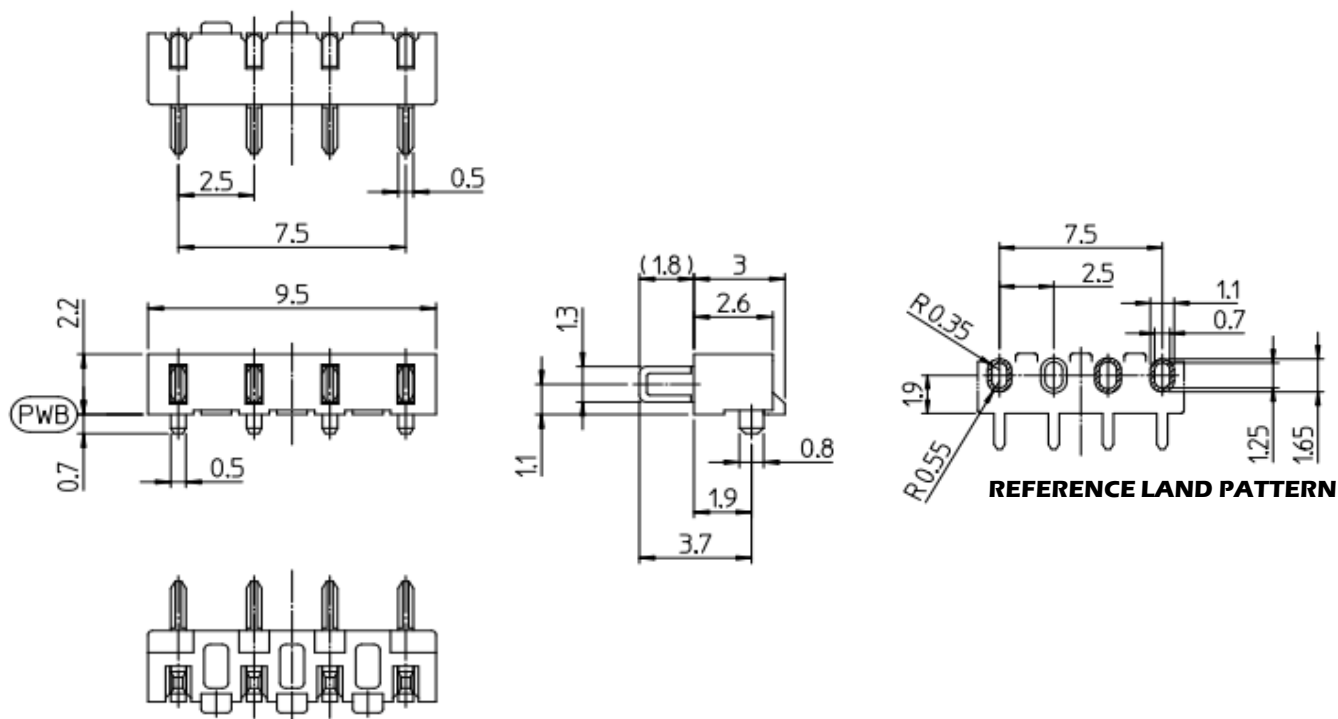


## Two Piece Blade Connector\_4Pin\_2.5mm Pitch\_Through Hole Series

### Basic Specification

<b>Part Number :</b>	<b>TBP-1813T-4-25-0000</b>
<b>Compatible Product :</b>	<b>TBR-2519T-4-25-0000</b>
<b>Rated Current :</b>	<b>AC/DC 12V, 1A</b>
<b>Contact Resistance :</b>	<b>50mΩ MAX</b>
<b>Operational Temp. :</b>	<b>-40°C~+85°C</b>
<b>Operational Durability :</b>	<b>2,000cycles</b>
<b>Floating Amount :</b>	<b>± 0.3mm</b>



### Electrical Characteristic

<b>Rated Current :</b>	<b>AC/DC 12V, 3A</b>
<b>Contact Resistance :</b>	<b>30mΩ MAX</b>
<b>Insulation Resistance :</b>	<b>100M Ω MIN</b>
<b>Dielectric Strength :</b>	<b>3mA (MAX) leakage</b>

### Mechanical Characteristics

<b>Terminal pulling off force :</b>	<b>Apply 2N static load on the terminal in axis direction for 1 minute.</b>
<b>Insertion force :</b>	<b>Measure the peak insertion force of initial condition.</b>

## **Two Piece Blade Connector\_4Pin\_2.5mm Pitch\_Through Hole Series**

### **Other Characteristic**

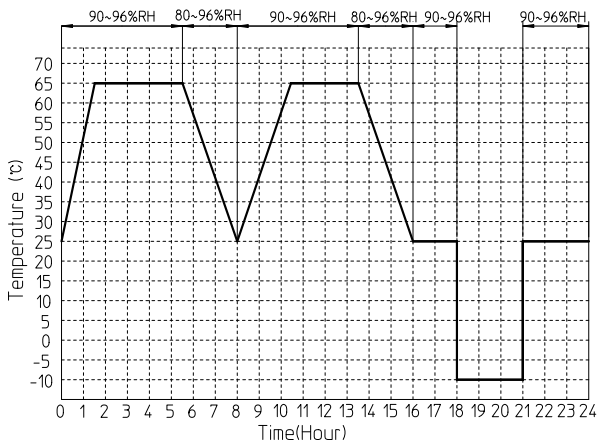
<b>Low Temp. Durability :</b>	<b>Store in temp <math>-40^{\circ}\text{C} \pm 3^{\circ}\text{C}</math> for 96 hours, then leaves in the ambient temperature for 1 hour.</b>
<b>High Temp. Durability :</b>	<b>Store in temp <math>+85^{\circ}\text{C} \pm 2^{\circ}\text{C}</math> for 96 hours, then leaves in the ambient temperature for 1 hour.</b>
<b>Humidity Durability :</b>	<b>Store in temp <math>+60^{\circ}\text{C} \pm 2^{\circ}\text{C}</math> with humidity of 90 to 95% for 96 hours, then leave in the ambient temperature for 1 hour.</b>
<b>Temp. And Humidity Cycle Test :</b>	<b>Repeat 10 continuous temperature and humidity cycles that shown on Fig1, then leave in the ambient temperature for 1 hour.</b>
<b>Temp. Cycle Test :</b>	<b>Repeat 5 continuous temperature cycles that shown on Table1, then leave in the ambient temperature for 1 hour.</b>
<b>Anti-corrosion(Salt Water Spray) :</b>	<b>Spay saline water for 48hours. (Density : <math>5 \pm 1\%</math> salt by weight, Temp : <math>35 \pm 2^{\circ}\text{C}</math>) After that, clean in lukewarm water and dry. Then leave in ambient temperature for 1 hour.</b>
<b>Vibration Test :</b>	<b>Connect each connector terminal in series and conducting 0.1A current. After that, apply the shock specified below. Amplitude : 1.5mm or 10G Sweeping cycle : 10~55~10Hz for 1min. Duration of test : 2hours for each of X, Y, Z axis.</b>
<b>Shock Test :</b>	<b>Connect each connector terminal in series and conducting 0.1A current. After that, apply the shock specified below. Acceleration rate : 50G(<math>490\text{m/s}^2</math>), half sine pulse Operation time : 11msec Duration : 3shocks in each X, Y, Z, axis both in negative and positive direction. ( 18shocks)</b>
<b>Soldering Heat Resistance :</b>	<b>Reflow profile(Refer to Fig2) Preheating : 180 to 200<math>^{\circ}\text{C}</math>, 120 <math>\pm</math> 30 sec. Peak temperature : 250<math>^{\circ}\text{C}</math> Peak time(Over 245<math>^{\circ}\text{C}</math>) : 10sec MAX.</b>

## Two Piece Blade Connector\_4Pin\_2.5mm Pitch\_Through Hole Series

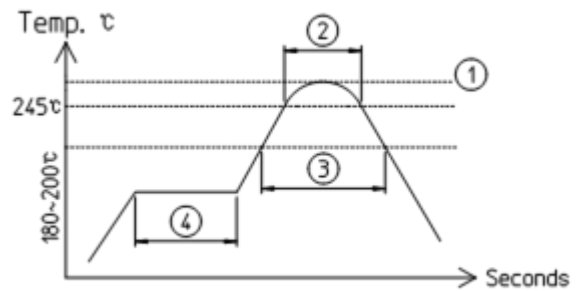
**Table 1. Temperature Cycle**

Step	Temperature(°C)	Time(minites)
<b>1</b>	<b>-40 ± 3</b>	<b>30 - 35</b>
<b>2</b>	<b>5 - 35</b>	<b>10 - 15</b>
<b>3</b>	<b>85 ± 2</b>	<b>30 - 35</b>
<b>4</b>	<b>5 - 35</b>	<b>10 - 15</b>

**Fig 1. Temp. and Humidity Cycle**



**Fig 2. Reflow Profile**



- ① MAX Temp. 250°C
- ② Peak time (245°C): 10sec. MAX
- ③ 220°C time: 80sec.
- ④ 190°C ± 10°C time: 120sec. ± 30sec.

- The specifications shown in this catalogue are subject to change without notice.
- Storage conditions: 35days max in room temperature