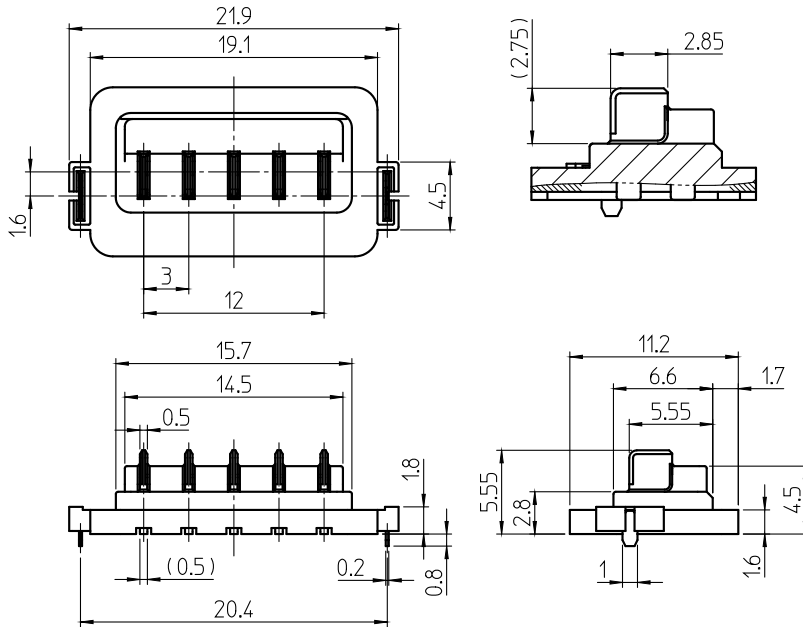


Yokowo SPRING LOADED CONNECTOR

Two Piece Blade Connector_5Pin_3.0mm Pitch_Through Hole_Water Proof Series

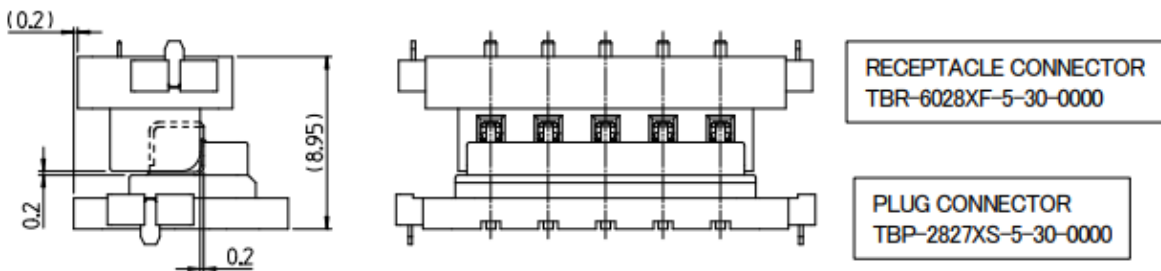
Basic Specification

Part Number :	TBP-2827XS-5-30-0000
Compatible Product :	TBR-6028XF-5-30-0000
Rated Current :	AC/DC 12V, 3A
Contact Resistance :	30mΩ MAX
Operational Temp. :	-40°C~+85°C
Operational Durability :	2,000cycles
Waterproof Rating :	IPX7



Testing Condition

All electrical measurement and testing shall be performed the recommended mating position which described below.



Electrical Characteristic

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

Mechanical Characteristics

Terminal Pulling Force : Apply 2N static load on the terminal in axis direction for 1 minute.

Two Piece Blade Connector_5Pin_3.0mm Pitch_Through Hole_Water Proof Series

Other Characteristic

Low Temp. Durability :	Store in temp $-40^{\circ}\text{C} \pm 3^{\circ}\text{C}$ for 96hours, then leaves in the ambient temperature for 1hour.
High Temp. Durability :	Store in temp $+85^{\circ}\text{C} \pm 2^{\circ}\text{C}$for 96hours, then leaves in the ambient temperature for 1hour.
Humidity Durability :	Store in temp $+60^{\circ}\text{C} \pm 2^{\circ}\text{C}$ with humidity of 90 to 95% for 96hours, then leave in the ambient temperature for 1 hour.
Temp. Cycle Test :	Cycle 5times(Table 1 shows test condition for 1cycle). Leave in the ambient temp for 1hour.
Temp. And Humidity Cycle Test :	Operate cycle test 10times.(Fig1) Then leave in the ambient temp for 1hour. The other issues are in conformity to JIS C60069-2-38.
Anti-corrosion(Salt Water Spray) :	Spray of salt water with $5 \pm 1\%$ density and $35 \pm 2^{\circ}\text{C}$ temperature for 48hours, cleaning with lukewarm water and dry, and leaving in ambient temperature.
Vibration Test :	Connect each connector pin in series, conducting current of 0.1A. After that, the vibration described below is added. Amplitude : 1.5mm Sweeping cycle : 10~55~10Hz for/minute Duration of test : 2hours for each of X, Y, Z axis.
Shock Test :	Connect each connector pin in series, conducting current of 0.1A. After that, the shock described below is added. Acceleration rate : 50G(490m/s²) Operation time of the test: 11ms Duration : 3shocks in each X, Y, Z, axis both in negative and positive direction. (18shocks)
Heat Resistance :	1. The electrical performance shall be measured after soldering for 3 seconds or less per terminal. (temperature of soldering iron : 350°C) 2. The electrical performance shall be measured in ambient temperature after soldering in accordance with the reflow profile Fig 2.
Waterproof :	Test according to IP standard with the fixture shown in Fig 3. Class : IPX7.

Two Piece Blade Connector_5Pin_3.0mm Pitch_Through Hole_Water Proof Series

Table 1. Temperature Cycle

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

Fig 1. Temp. and Humidity Cycle



Fig 2. Reflow Profile

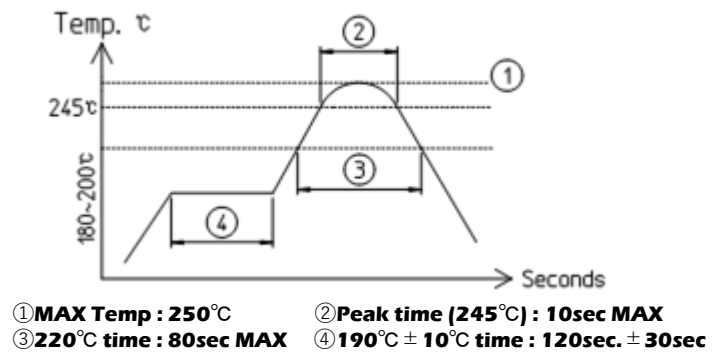
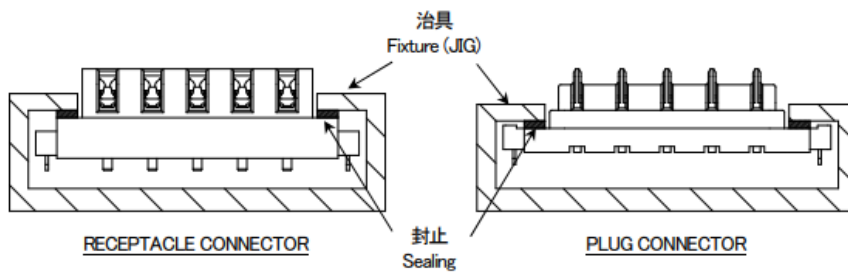


Fig 3. Waterproof Test Fixture



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