Breadboard Plugin Components Pack   SKU:KIT0098

Overview

Breadboard-Plugin series is a new kit for breadboard experiment. It provides convenient, reliable and reusable components, plugins and modules. This innovative approach will solve the following issues when using a breadboard:

- The problem by using DIP type of components
  Hard to read the value (Resistor color codes)
  Severe deformations of the pin after used, non-reusable, not environment-friendly
  The pin diameter is too thin or too thick, poor match with the breadboard hole
  Confused the order of transistor "e", "b", "c" pins

- Usage problem: Most of sensors and actuators require 3 interfaces: Signal/VCC/GND, you have to use the jumper wire for the connection, messy and unreliable.

Features

- **Easy to recognize** : Resistance value, capacitance values, positive/negative polaron and pin functions are marked clearly.
- **Easy to learn** : The circuit symbol is clearly visible, directly match the circuit diagram
- **Easy to use** : Direct-plug pin
- **Easy to Plug/unplug** : The 0.64mm diametral pin matches the breadboard hole perfectly
- **High-reliability** : ENIG technology, the circuit connection is reliable and durable
- **Environment-friendly** : Reusable and Environment-friendly

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Breadboard-Plugin is designed by Maker LeoYan, produced and sold by DFRobot
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Specification

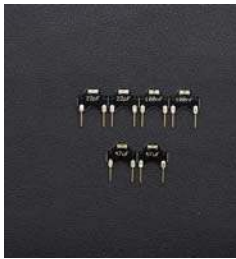| Resistors		
Description		
Package: 1206		
Resistance: 220R, 1K, 4.7K, 10K		
Pins: 2		
Lead Pitch: 4x2.54mm (400mil)		
Dimensions (without pins): 13.8 (w) x 11.4 (h) mm		

resistors

Capacitors		
Description		
Package: 1206		
Capacitance: 22pF@50V, 100nF(0.1uF)@50V, 47uF@10V		
Pins: 2		
Lead Pitch: 4x2.54mm (400mil)		
Dimensions (without pins): 13.8(W) x 11.4(H) mm		

Capacitors

Leds		
Description		
Package: 1206 (PCB integrates current limiting resistance)		
Color: Red (R), Yellow (Y), Green (G), Blue (B)		
Pins: 2		
Lead Pitch: 4x2.54mm (400mil)		
Dimensions (without pins): 13.8(W) x 14.5(H) mm		

Leds

Diodes

Description
Type: SS14 (Schottky Barrier Rectifiers)
Parameter: If=1A, Vfm=0.7V, Vr=40V
Pins: 2
Lead Pitch: 4x2.54mm (400mil)
Dimensions (without pins): 13.8(W) x 11.5(H) mm

Diodes

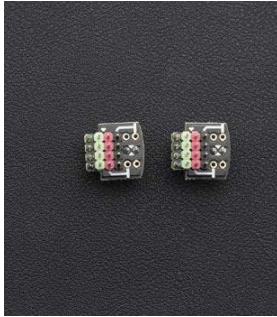## Transistor-NPN

Description
Type: BC817-25
Parameter: Vceo=45V, Ic=500mA, hFE=400
Pins: 3
Lead Pitch: 2x2.54mm (200mil)
Dimensions (without pins): 13.8(W) x 11.7(H) mm

Transistor-NPN

Transistor-PNP

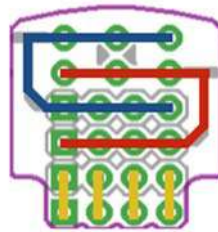| Description |
| --- |
| Type: BC807-25 |
| Parameter: Vceo=-45V, Ic=-500mA, hFE=400 |
| Pins: 3 |
| Lead Pitch: 2x2.54mm (200mil) |
| Dimensions (without pins): 13.8(W) x 10.7(H) mm |

Transistor-PNP

Breadboard Plugin Connector	
	Description
	Support 4 x 3-Pin modules
	Dimensions: 15.2x16.2mm

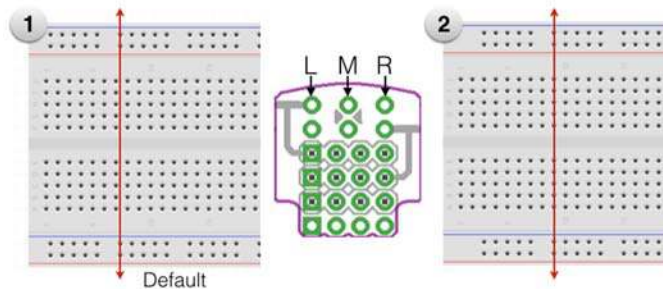Breadboard Plugin
Connector

Instructions

1. **Breadboard Plugin Connector**
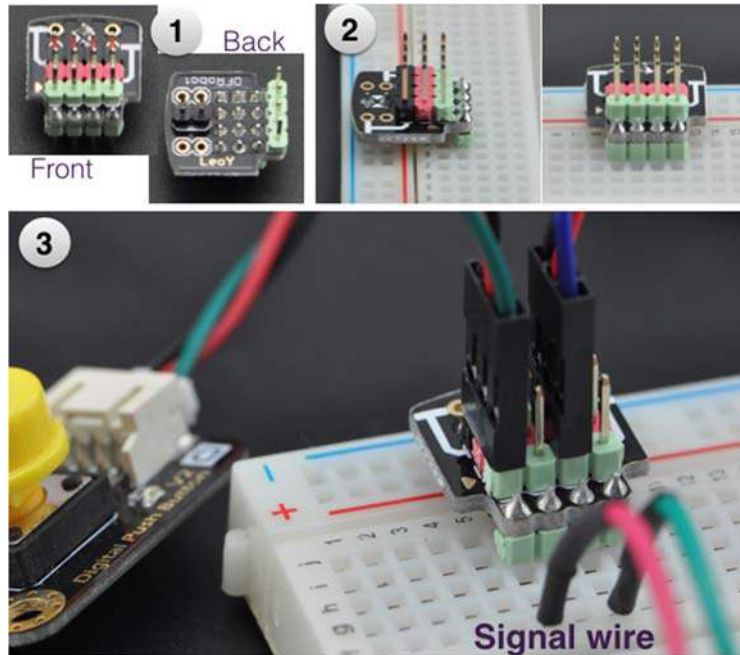
- **Circuit Schematic**

- **Breadboard**

  The kit supports following kinds of breadboard:

- Breadboard 1: it is the default supported breadboard, can use it directly.
- Breadboard 2: If using this kind of bread board, resolder Pin at "M" and solder the Pin to "L" or "R".

- **Usage tutorial**

1. Recognize the front and back
2. Plug the back pins into Breadboard
3. Plug the Module on the breadboard plugin board. (Please notice the power polarities)

For any question/ advice/ cool idea to share with us, please visit **DFRobot Forum** or Email to Techsupport Team <techsupport@dfrobot.com>.