

SunFounder SF0180 9g Servo

1. Application Environment

Item	Specification
Storage Temperature Range	-10°C~60°C
Operating Temperature Range	-10°C~60°C
Operating Voltage Range	4.8V~6.0V

2. Standard Test Environment

2-1	Standard Test Environment	The inspection of every characteristic should be carried out under the normal temperature and humidity – temperature $25\pm 5^{\circ}\text{C}$ and relative humidity $65\pm 10\%$. Please implement the standard testing based on the condition.
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3. Appearance Inspections

No.	Item	Specification
3-1	Outlook	See the last page
3-2	Appearance	No damage which affects functions allowed.

4. Electrical Specifications

No.	Item	4.8V	6.0V
4-1	Operating speed (no load)	0.12 Sec/60°	0.09 Sec/60°
4-2	Running current (no load)	140 mA	200 mA
4-3	Stall torque (locked)	2.0 kg-cm	2.5 kg-cm
4-4	Stall current (locked)	520 mA	700 mA
4-5	Idle current (stop)	5 mA	5 mA

Note: Item 4-2 definition is average value when the servo running with no load.

5. Mechanical Specifications

No.	Item	Specification
5-1	Overall Size	See the drawing at the end
5-2	Limit Angle	200°±10°
5-3	Weight	9 g (without servo rocker arms and screws)
5-4	Connector Wire Standard	#28 AWG
5-5	Connector Wire Length	190±5 mm
5-6	Rocker Arm Standard	21T
5-7	Rocker Arm Type	Round; Blade

6. Control Specifications

No.	Item	Specification
6-1	Control System	Pulse Width Modulation
6-2	Operating Angle	90°±5°
6-3	Neutral Point	1500 µsec
6-4	Dead band width	5 µsec
6-5	Rotating Direction	Clockwise (1000~2000 µsec)
6-6	Pulse Width Range	750~2250 µsec
6-7	Maximum Travel	Approx. 140° (When 750~2250 µsec)

