

1. Apply Environmental Condition :

No.	Item	Specification
1-1	Storage Temperature Range	-20°C ~ 60°C
1-2	Operating Temperature Range	-10°C ~ 50°C
1-3	Operating Voltage Range	4.5V ~ 7.2V

2. Standard Test Environment :

2-1	Standard Test Environment	Every characteristic of the inspect must be normal temperature and humidity carry out the test , temperature 25±5°C and relative humidity 65±10% of judgment made in accordance with this specification standard testing conditions.
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3. Appearance Inspection :

No.	Item	Specification
3-1	Outline Drawing	Dimension see the attachment
3-2	Appearance	No damage which affects functions allowed

4. Electrical Specification (Function of the Performance) :

No.	Item	4.8V	6.0V
4-1	Operating speed (at no load)	0.22 sec/60°	0.17 sec/60°
4-2	Running current (at no load)	100 mA	120 mA
4-3	Stall torque (at locked)	3.2 kg-cm	4.1 kg-cm
4-4	Stall current (at locked)	800 mA	1000 mA
4-5	Idle current (at stopped)	5 mA	5 mA

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

5. Mechanical Specification :

No.	Item	Specification
5-1	Overall Dimensions	See the drawing
5-2	Limit angle	200°± 5°
5-3	Weight	40 ± 1 grams (without servo horn)
5-4	Connector wire gauge	#26 AWG
5-5	Connector wire length	300 ±5 mm
5-6	Horn gear spline	25T/ φ 5.97
5-7	Horn type	Cross , Disk , Star
5-8	Reduction ratio	1/278



Product Name

DIGITAL SERVO

Model No.

HD-4180BB

Version

V1

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6. Control Specification :

No.	Item	Specification
6-1	Control system	Pulse width modification
6-2	Amplifier type	Digital controller
6-3	Operating travel	124° (when 1000→2000 μ sec)
6-4	Neutral position	1500 μ sec
6-5	Dead band width	5 μ sec
6-6	Rotating direction	Counterclockwise (when 1000→2000 μ sec)
6-7	Pulse width range	700→2300 μ sec
6-8	Maximum travel	Approx 185°(when 700→2300 μ sec)

