

Technical Data Sheet
Metal Gear Digital Servo
Part No. LS-0009AF

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 - 6.0V

2. Standard Test Environment

No.	Item	Specification
2-1	Standard Test Environment	Any test must be under normal temperature and humidity. Temperature: $25 \pm 5^{\circ}\text{C}$ Humidity: $65 \pm 10\%$, according to the standard to judge.

3. Electrical Specification (Function of the Performance)

No.	Item	4.8V	6.0V
4-1	Operating speed (at no load)	0.12 sec / 60°	0.1 sec / 60°
4-2	Running current (at no load)	120 mA	150 mA
4-3	Stall torque (at locked)	1.3 kg - cm,	1.5 kg - cm
4-4	Stall current (at locked)	900 mA	1 A
4-5	Idle current (at stopped)	4 mA	5 mA

4. Mechanical Specification

No.	Item	Specification
5-1	Overall Dimensions	22.3*11.8*26.3
5-2	Limit angle	$180^{\circ} \pm 10^{\circ}$
5-3	Weight	10 ± 1 g
5-4	Connector wire gauge	# 28 PVC
5-5	Connector wire length	180 ± 5 mm
5-6	Horn gear spline	21T/ ψ 4.86
5-7	Reduction ratio	320:1

5. Control Specification

No.	Item	Specification
6-1	Control system	Change pulse width
6-2	Amplifier type	Analog control
6-3	Operating travel	90° (at 1000 \rightarrow 2000 μ sec)
6-4	Neutral position	1500 μ sec
6-5	Dead band width	4 μ sec
6-6	Rotating direction	anticlockwise (at 1500 \rightarrow 2000 μ sec)
6-7	Pulse width range	800 \rightarrow 2200 μ sec
6-8	Maximum travel	About 165° (at 800 \rightarrow 2200 μ sec)

