

SHENZHEN SKY STAR TECHNOLOGY CO., LTD

Data Sheet of MG90S Analog Servo Motor

Products Specification

| | | | |
|---|-----------------------------|---------------------------------------|-------------|
| Products Name:MG90S Analog servo | | Products No. | |
| 1. Apply Environmental Conditon | | | |
| No. | Item | Specifcation | |
| 1.1 | Storage Temperature Range | -30°C~80°C | |
| 1.2 | Operating Temperature Range | -25°C~70°C | |
| 2.Standard Test Environment | | | |
| No. | Item | Specifcation | |
| 2.1 | Temperature Range | -25°C~70°C | |
| 2.2 | Humidity Range | 65%±10% | |
| 3. Mechanical Specification | | | |
| No. | Item | Specifcation | |
| 3.1 | Size | 22.4*12.1*22.8mm | |
| 3.2 | Weight | 13.5g±5% | |
| 3.3 | Gear type | Metal | |
| 3.4 | Limit angle | 200°±5° | |
| 3.5 | Bearing | NO | |
| 3.6 | Horn gear spline | 20T Diameter:4.9mm | |
| 3.7 | Horn type | Plastic, POM | |
| 3.8 | Case | Engineering plastics(PBT) | |
| 3.9 | Connector wire | 250mm±5mm | |
| 3.10 | Motor | Carbon brush motor | |
| 3.11 | Splash water resistance | No | |
| 4.Electrical Specification | | | |
| No. | Operat voltage | 4.8V | 6.0V |
| 4.1 | Idle current | mA | mA |
| 4.2 | No load speed | 0.12sec/60° | 0.09sec/60° |
| 4.3 | Runnig current | 90mA | 90mA |
| 4.4 | Peak stall torque | 1.8kg.cm | 2.0kg.cm |
| 4.5 | Stall current | 750mA±10% | 860mA±10% |
| 5.Control Specification | | | |
| No. | Item | Specifcation | |
| 5.1 | Command signal | Pulse width modification | |
| 5.2 | Amplifier type | Analog controller | |
| 5.3 | Pulse width range | 500~2500usec | |
| 5.4 | Neutral position | 1500usec | |
| 5.5 | Running degree | 180°±3°(when 500~2500usec) | |
| 5.6 | Dead band width | 5 usec | |
| 5.7 | Rotating direction | Counterclockwise (when 1000~2000usec) | |

