

AD0BA Technical Specification

(THIS DATA IS JUST A REFERENCE. IT IS NOT A GUARANTEED DATA.)

| Item | | Specification | | | | Remark | | |
|------|-----------------------------|---|-----------------|-------|---------|---|--------------------------------|--|
| 1 | Communication Interface | PWM | | | | Signal Voltage:V | HIGH : min.1.5V , max.Vcc | |
| | | | | | | Frame Rate:T | 14.25~20.0ms (Default 14.25ms) | |
| | | | | | | Left/Center/Right:Td | 2120/1520/920us | |
| | | | | | | Resolution | ≤ 1us | |
| | | | | | | | | |
| 2 | Rated Voltage | 4.8~6.0V DC | | | | - | | |
| 3 | Operating Voltage | 4.0~6.0V DC | | | | - | | |
| 4 | Standby Current | ≤ 15mA | | | | - | | |
| 5 | Starting Current* | 1.2A | | | | at 6.0V | | |
| 6 | Consumption Current* | LL | Me | UL | unit | at 6.0V , No-Load | | |
| | | 115 | 165 | 215 | mA | LL : Low Limit Me : Medium Value UL : Upper Limit | | |
| 7 | Max. Torque* | LL | Me | UL | unit | at 6.0V | | |
| | | 5.2 | 6.5 | 7.8 | kgfcm | | | |
| | | 0.51 | 0.64 | 0.76 | Nm | | | |
| | | 72.2 | 90.3 | 108.3 | oz-in | | | |
| 8 | Rated Torque* | LL | Me | UL | unit | at 6.0V 20% of Max. Torque | | |
| | | 1.0 | 1.3 | 1.6 | kgfcm | | | |
| | | 0.10 | 0.13 | 0.15 | Nm | | | |
| | | 14.4 | 18.1 | 21.7 | oz-in | | | |
| 9 | No Load Speed* | LL | Me | UL | unit | at 6.0V | | |
| | | 0.16 | 0.16 | 0.2 | sec/60° | | | |
| | | 300.0 | 375.0 | 375.0 | °/sec | | | |
| | | 50.0 | 62.5 | 62.5 | rpm | | | |
| 10 | Default Travel Angle | CW 60° (920us) CCW 60° (2120us) | | | | - | | |
| 11 | BackLash* | ≤ 0.7° | | | | - | | |
| 12 | Operating Temperature Range | -10~+45°C (14~113°F) | | | | - | | |
| 13 | Storage Temperature Range | -20~+60°C (-4~140°F) | | | | - | | |
| 14 | Outer Dimension | 1.58 x 0.79 x 1.5 inch (40.0 x 20.0 x 38.1mm) | | | | - | | |
| 15 | Weight | 1.45 oz (41g) | | | | - | | |
| 16 | Case Material | Upper : Resin / Middle : Resin / Bottom : Resin | | | | - | | |
| 17 | Gear Set Material | 1st...Final : Resin | | | | - | | |
| 18 | Cable | Non-Shielded Cable | | | | Cable Length : 11.81 inch (300mm) | | |
| 19 | Connector | Manufacture | J.A.M Co., LTD. | | | | | |
| | | Type | FC25-03HG | | | | | |
| | | Mating | FC25-03M etc. | | | | | |
| | | Pin Assignment | 1 | White | PWM | | | |
| | | 2 | Red | Vcc | | | | |
| | | 3 | Black | GND | | | | |
| 20 | Vibration Resistance * | ≥ 100h (Non-operating state) (After the Test , The Servo works normally) | | | | Test Condition | | |
| | | | | | | Frequency range | 80 to 400Hz | |
| | | | | | | Acceleration | 30G (294m/s ²) | |
| | | | | | | Sweep rate | 1.2min | |
| | | | | | | Vibration axis | X , Y , Z | |

* At 23±5°C (Initial Performance Data)

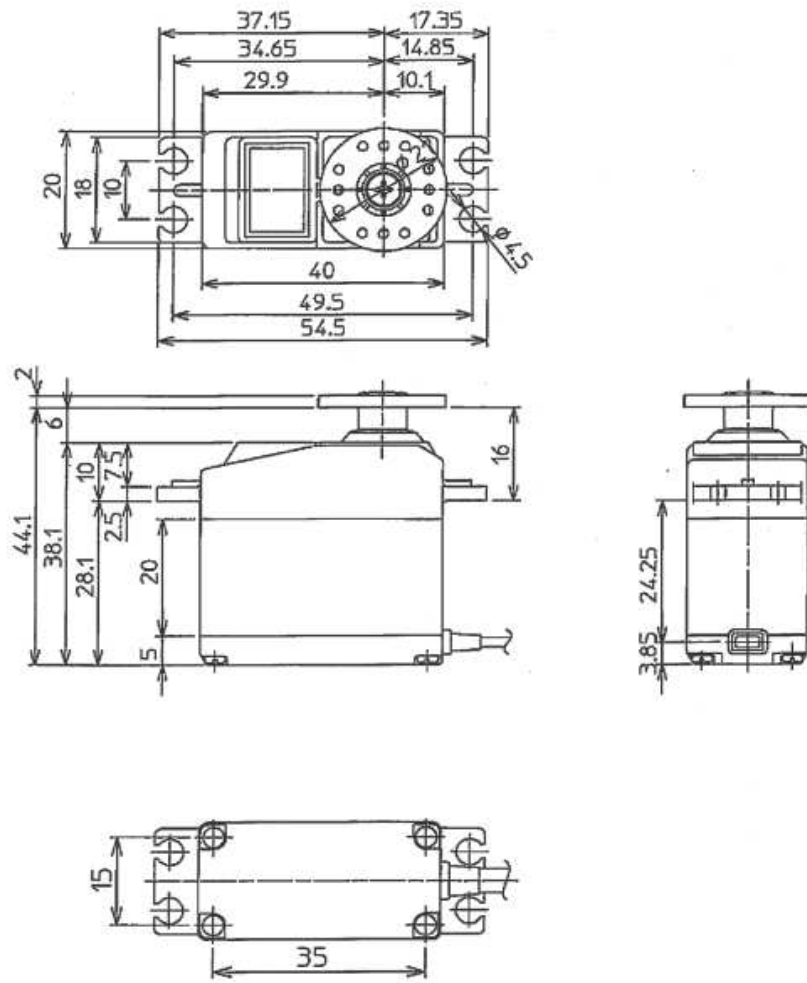
All Specifications are subject to change without prior notice.

■ Caution

This product SHOULD NOT been used for the devices that is directly related to human life and/or harmful devices for human body such as below applications.

- (1)Medical Devices
- (2)Aerospace/Aviation Related Devices
- (3)Nuclear Related Devices e.t.c.

Outer Dimension



(Unit mm)