

# AD1BE Technical Specification

Update Number

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

171117-01

Item		Specification				Remark	
1	Communication Interface	PWM				Signal Voltage:V	Max : Vcc
							Min : 3.0V
						Frame Rate:T	14.25~20ms
						CW/Center/CCW:Td	920/1520/2120 μs
						Resolution	≤ 1us
2	Rated Voltage	4.8~6.0V DC				-	
3	Operating Voltage	4.0~6.0V DC				-	
4	Standby Current	≤ 12mA				-	
5	Consumption Current*	LL	Me	UL	unit	LL : Low Limit Me : Medium Value UL : Upper Limit	
		75	140	205	mA	at 4.8V , No-Load	
		95	170	245	mA	at 6.0V , No-Load	
6	Max. Torque*	1.0	1.5	2.0	kgf-cm	at 4.8V	
		0.10	0.15	0.20	N-m		
		13.9	20.8	27.8	ozf-in		
		1.2	1.7	2.3	kgf-cm	at 6.0V	
		0.12	0.17	0.23	N-m		
		16.7	23.6	31.9	ozf-in		
7	No Load Speed*	0.07	0.1	0.13	sec/60°	at 4.8V	
		461.5	600.0	857.1	°/sec		
		76.9	100.0	142.9	rpm		
		0.06	0.09	0.12	sec/60°	at 6.0V	
		500.0	666.7	1000.0	°/sec		
		83.3	111.1	166.7	rpm		
8	Default Travel Angle	CW 60° (920 μs) CCW 60° (2120 μs)				-	
9	BackLash*	≤ 0.5°				-	
10	Operating Temperature Range	0~+45°C (32~113°F)				-	
11	Storage Temperature Range	-10~+60°C (14~140°F)				-	
12	Outer Dimension	0.86 x 0.43 x 0.92 inch (21.8 x 11.0 x 23.3mm)				-	
13	Weight	0.28oz (7.8g)				-	
14	Case Material	Upper : Resin / Middle : Resin / Bottom : Resin				-	
15	Gear Set Material	1st : Resin / 2nd : Resin / 1st : Resin / Final : Resin				-	
16	Cable	Non-Shielded Cable				Cable Length : 7.09 inch (180mm)	
17	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				
18	Vibration Resistance *	Operating time(at 4.8V) ≥ 20h Non Operating time ≥ 100h				Test Condition	
						Frequency range	80 to 400Hz
						Acceleration	10G (98m/s <sup>2</sup> )
						Sweep rate	1.2min
						Vibration axis	X, Y, Z

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

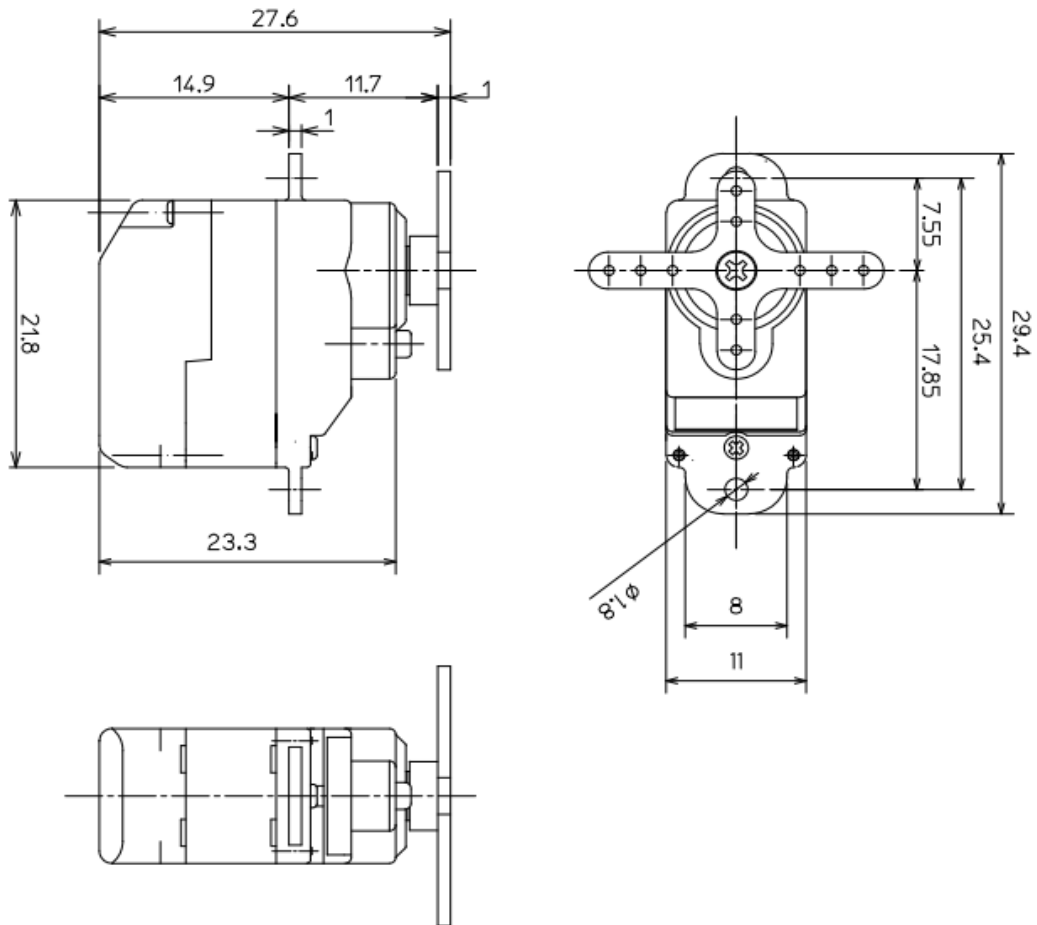
**All Specifications are subject to change without prior notice.**

**Caution**

This product SHOULD NOT be 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)

※Dimensions are for reference only.