

AD1FA Technical Specification

Update Number
170213-02

(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	3.0~30ms (Default 14.25ms)	
						Left/Center/Right:Td	2120/1520/920μs (Resolution recommends less than 1μs.)	
2	Rated Voltage	4.8V DC				-		
3	Operating Voltage	4.0 ~ 4.8V DC				-		
4	Standby Current	≤ 30mA				-		
5	Consumption Current*	LL	Me	UL	unit	LL : Low Limit Me : Medium Value UL : Upper Limit at 4.8V , No-Load		
		30	70	110	mA			
6	Max. Torque*	LL	Me	UL	unit	at 4.8V		
		3.0	3.8	4.6	kgf-cm			
		0.29	0.37	0.45	N-m			
		41.7	52.8	63.9	ozf-in			
7	No Load Speed*	LL	Me	UL	unit	at 4.8V		
		0.19	0.24	0.29	sec/60°			
		206.9	250.0	315.8	°/sec			
		34.5	41.7	52.6	rpm			
8	Default Travel Angle	CW 60° (920us) CCW 60° (2120us)				-		
9	BackLash*	≤ 0.5°				-		
10	Operating Temperature Range	-10~+45°C (14~113°F)				-		
11	Storage Temperature Range	-20~+60°C (-4~140°F)				-		
12	Outer Dimension	30 x 10.8 x 29mm (1.18 x 0.425 x 1.14 inch)				-		
13	Weight	23g (0.81oz)				-		
14	Case Material	Upper : Resin / Middle : Resin / Bottom : Resin				-		
15	Gear Set Material	1st : Resin / 2nd...Final : Metal				-		
16	Cable	Non-Shielded Cable				Cable Length : 150mm (5.91 inch)		
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	MTTF	150h (Calculated by Weibull analysis.)				Test Condition • Test Voltage : 4.8V • Load : 30% of Max. Torque • Operating Condition : 0.5Hz sweep (±60°) • Input Pluse : PWM		
19	Vibration Resistance *	Operating time(at 4.8V) ≥ 100h				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

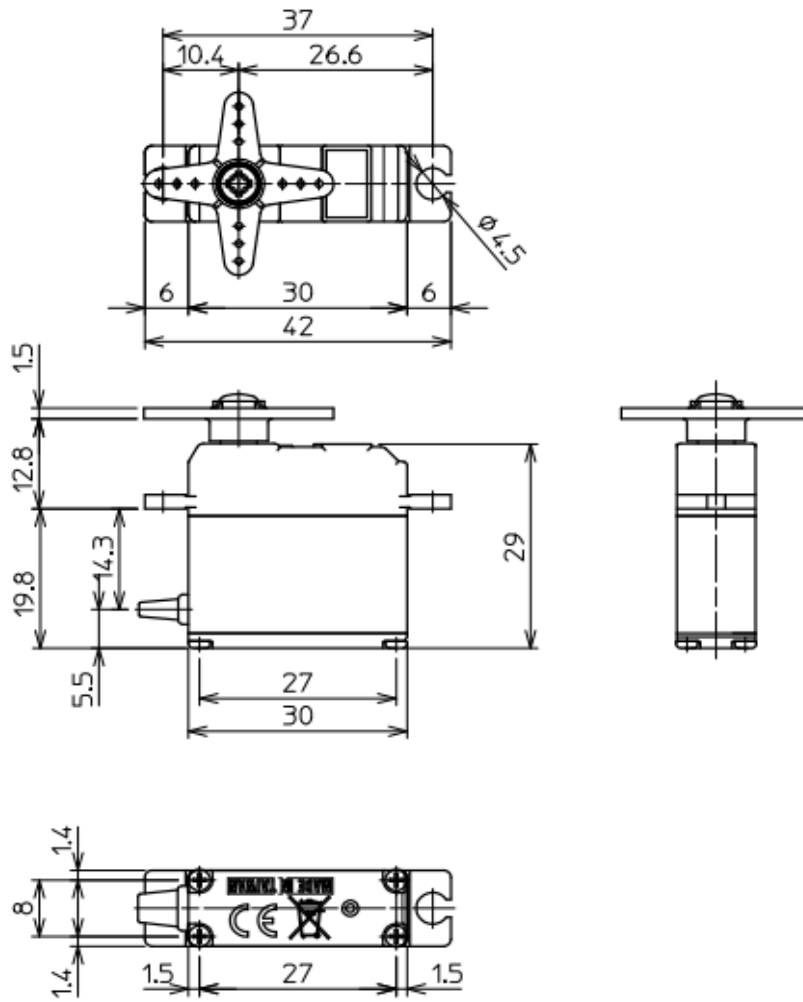
This product SHOULD NOT be used for the devices that is directly related to human life and/or harmful devices for human body such as below applications.

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

Outer Dimension

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(Unit mm)