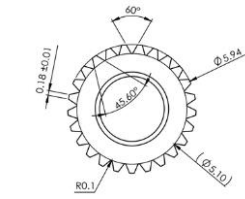
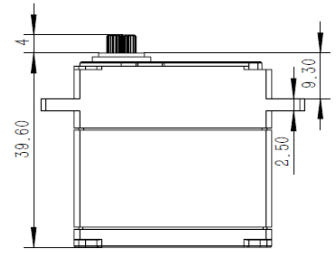
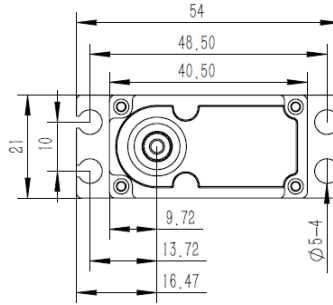


### MS3509 Technical Specification



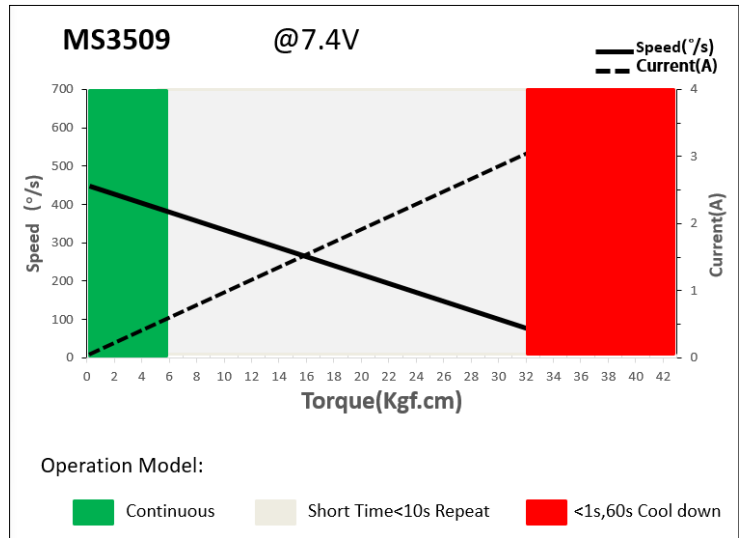
25T-6mm  
Output Shaft Spline



### 1. Operating Data

	MS3509
Rated Voltage	DC7.4V
Voltage Range	DC6.0V-8.4V
Torque	30Kgf.cm@6.0V
	32Kgf.cm@7.4V
	35Kgf.cm@8.4V
Speed	0.14sec/60°@6.0V
	0.13sec/60°@7.4V
	0.12sec/60°@8.4V
Working Frequency	1520us/333Hz
Default Travel Angle	± 100°=200°Total
Temperature Range	-10°C.....+65°C
Case Material	Aluminum Alloy
Motor Type	Coreless DC Motor
Gear Set Material	Hardened Steel
Position Sensor	Potentiometer
Case Dimensions	40.5mm*21mm*39.6mm±0.2mm
Weight	78g±10%
Ball Bearing	2 BB

### 2. Performance



### 3. Command signal

#### 3.1. PWM Command Interface

Signal Voltage	TTL-level: HIGH: min.3.3V, max.5.0V Low: min.0.0V, max.1.5V
Pulse Lengths	500us-2500us
Pulse Lengths for Position -50°/ 0°/+50°	1000us/1500us/2000us

### 4. Electrical Connection

	Pin Assignment (PWM)			
	1	Yellow	SIG	Command Signal
	2	Red	DC+	Supply Voltage
	3	Brown	DC-(GND)	Supply Ground, Signal Ground