

YFD

YingFuDa Micro Motor Co Ltd

盈富达微电机有限公司

## Product Specification

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Customer Name \_\_\_\_\_

Model No. YFD365V-2078-51

Specification No. 1806011

Revision A1

Date issued 2020.3.18

**CONFIRMED & ACCEPTED BY CUSTOMER**  
***COMPANY, CHOP & SIGNATURE***

DATE :

PREPARED BY: YWjiang18/3-20 CHECKED BY: \_\_\_\_\_ APPROVED BY: \_\_\_\_\_

## Product Specification

**Model No:YFD365V-2078-51****Sample No:1806011**

- 1. Motor Type:** Small DC motor
- 2. Standard Operating Conditions:**
- 2-1 Rated Voltage: 30.0V DC CONSTANT between motor terminals.
  - 2-2 Direction of Rotation: CCW when viewed from output shaft side.
- 3. Measuring Conditions:**
- 3-1 Motor Position: Motor to be held with shaft horizontally.
  - 3-2 Power Supply: Regulated power supply which assures unquestionable measurement.
  - 3-3 Environment Temperature and Humidity: The test is made in principle at a temperature between 15°C and 35°C and at a relative humidity 75%.
- 4. Electrical Characteristics (at initial stage after 30 seconds run-in):**
- 4-1 No Load Current: 0.39A max.
  - 4-2 No Load Speed: 34400±10% rpm.
  - 4-3 No Load Starting Voltage: 2.0Vmax
  - 4-4 Rated Load Current: 1.77±12%A .
  - 4-5 Rated Load Speed: 25280±10% rpm.
  - 4-6 Rated Load: Fan load with size 15x40 mm(approximately equivalent to 182.0g-cm.)
  - 4-7 Reference Characteristic Curve: See Motor Performance Curves and Characteristics .
  - 4-8 Insulation Resistance: 10 M ohm(min) (DC:500V)  
between motor terminal and motor metal housing
  - 4-9 Dielectric Strength: AC 500V/1mA(50Hz to 60Hz) for one minute  
between motor terminal and motor metal housing
  - 4-10 Vibration value: ≤4.9mm/s
- 5. Mechanical Characteristics:**
- 5-1 External Appearance: See Motor Outline
  - 5-2 Shaft End Play: 0.05~0.5 mm
  - 5-3 Runout of Shaft Extension: 0.05 mm max. at 2/3 of output shaft side and measured by dial gauge
  - 5-4 Motor Weight: 52.7 g (Approx)
- 6.Life:**
- 6-1 Test voltage: 30.0V (Regulated DC power supply)
  - 6-2 Load Torque: Fan load equivalent to 90.0 g.cm
  - 6-3 Load Current: 1.36A max
  - 6-4 Load Speed: 28800±10% rpm
  - 6-5 Test cycle: 15 min on, 15 min off is cycle
  - 6-6 Duration: 600 cycle
- 7. Noise test** 75db(A) max/RMS,with following condition.No load at rated voltage,Set on sponge.Microphone at 30 cm aligned on the motor axis;background noise-level is 30dB(A)max/RMS.
- 8. Other Characteristics:**
- 8-1 Insulation Grade: Class F
  - 8-2 ECP Requirement: Motor conform to 2011/65/EU RoHS Directive

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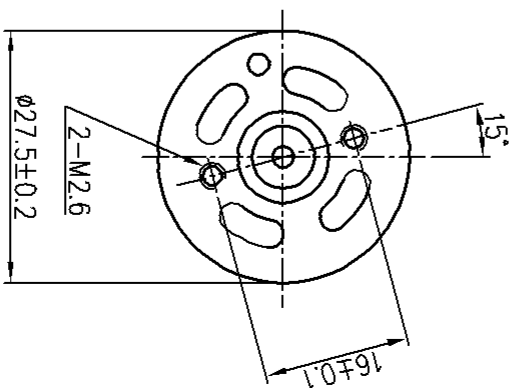
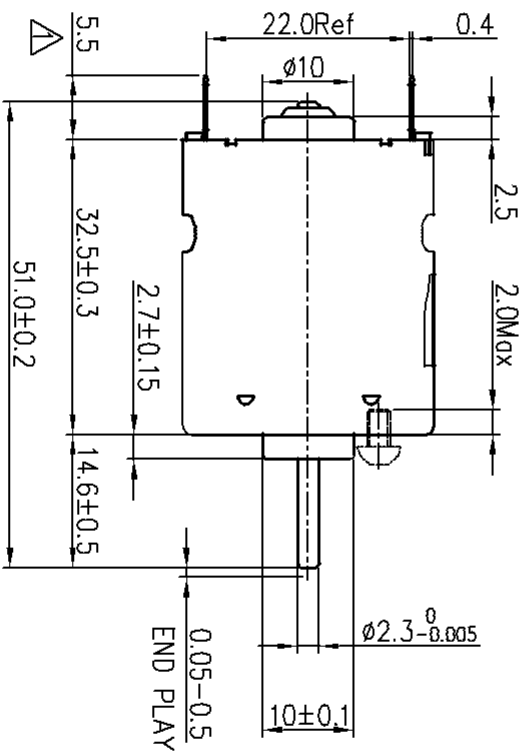
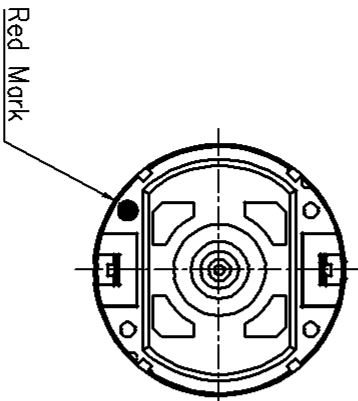
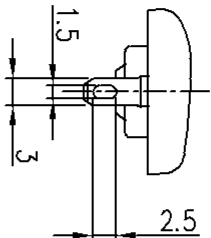
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SERIAL NO :

ISSUE NO :

REMARKS:

- 1) WHEN PRESS FITTING A GEAR/PULLEY OR ANYTHING ALIKE ONTO MOTOR OUTPUT SHAFT, DO PUSH THE OTHER SHAFT END VERTICALLY, DON'T PUSH THE REAR BRACKET
- 2) SOLDERING TEMPERATURE AND TIME MUST BE 360(3SEC) OR 400(2SEC)
- 3) MEASURING THE DIMENSION OF THE SHAFT EXTENSION WHEN THE OTHER END OF THE SHAFT IS AGAINST THE REAR BRACKET END.



DIRECTION OF ROTATION



CONFIRMED & ACCEPTED BY CUSTOMER

Company, Chop & Signature

TITLE: MOTOR OUTLINE

DES'D	YWjiang2/6-18
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CHK'D		
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PART NO: YFD365V-2078-51

APP'D		
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SCALE	1:1	REV
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# YingFuDa Micro Motor



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ITME

端子伸出长度由7.0mm变更为5.5mm

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DATE	DE
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ESD A

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DATE:

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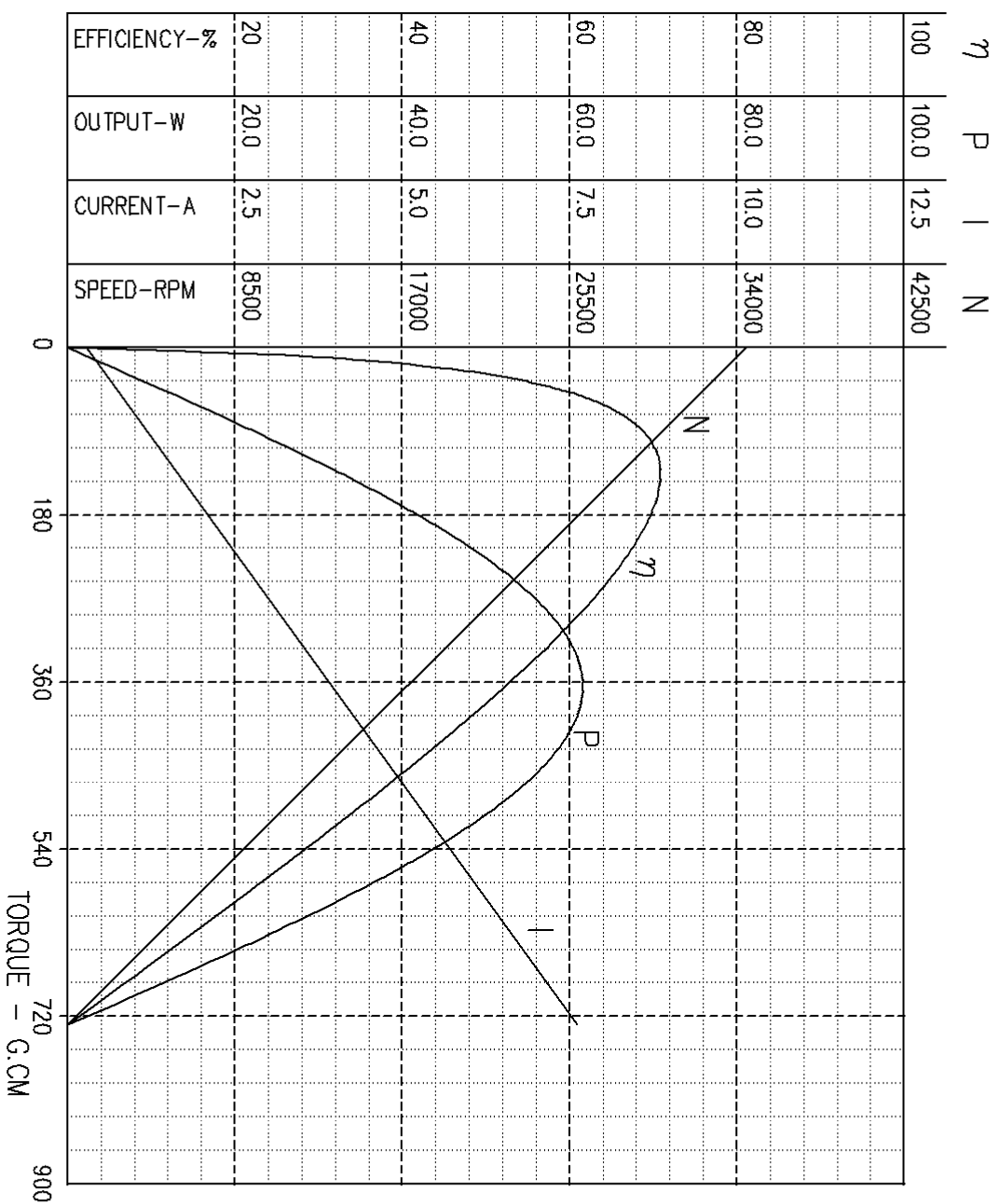
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FOSHAN SHUNDE YINGFUDA MICRO MOTOR

MOTOR PERFORMANCE CURVES AND CHARACTERISTICS:



MODEL: YFD365V-2078-51

OPERATING RANGE 6.0-30V

NOMINAL VOLTAGE: 30.0V

PERFORMANCE

AT NO LOAD

SPEED = 34482 RPM  
CURRENT = 0.24 AMP

AT STALL EXTRAPOLATION

TORQUE = 729.3 G.CM  
CURRENT = 7.62 AMP.

AT MAXIMUM EFFICIENCY:

EFFICIENCY = 71.0 %  
SPEED = 26758 RPM  
TORQUE = 136.9 G.CM  
CURRENT = 1.76 AMP.  
OUTPUT = 37.6 WATTS

AT MAXIMUM OUTPUT

SPEED = 16471 RPM  
TORQUE = 364.6 G.CM  
CURRENT = 4.0 AMP.  
OUTPUT = 61.6 WATTS

THE CURVES REPRESENT THE THEORETICAL PERFORMANCE OF THE SAMPLE ONLY.