

MiniScience Inc.

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RE140RA DC 1.5 V Motor (High Speed Motor)

SPECIFICATION

Model No.: **RE140RA (DC Motor)**

1. MEASURING CONDITIONS

- 1.1. Rated voltage: 1.2 V DC
- 1.2. Motor Position: To be measured with motor horizontally held.
- 1.3. Environmental temperature: $25 \pm 10^\circ\text{C}$.
- 1.4. Environmental humidity: $65 \pm 20\% \text{RH}$.

2. ELECTRICAL CHARACTERISTICS (At initial stage after 30 seconds run-in):

- 2.1. At No load
 - 2.1.1. Speed: $6000 \pm 12\% \text{rpm}$
 - 2.1.2. Current: 220 A max
- 2.2. At Max Efficiency
 - 2.2.1. Torque: 6.6 g.cm
 - 2.2.2. Speed: $4481 \pm 12\% \text{rpm}$
 - 2.2.3. Current: 0.5 A (max 0.8A)
- 2.3. At Stall
 - 2.3.1. Torque: 26 g.cm
 - 2.3.2. Current: 1.48 A (max 2.2A)
- 2.4. Direction of Rotation: CW (Clockwise when viewing from the output shaft end with positive voltage applied to positive terminal).

3. MECHANICAL CHARACTERISTICS

- 3.1. Dimension drawing: See <OUTLINE>.
- 3.2. End Play: 0.05 ~ 0.5mm.
- 3.3. Operating Temperature: $0^\circ\text{C} \sim +45^\circ\text{C}$

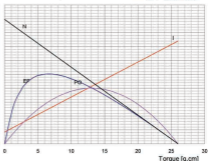
PERFORMANCE CURVE

Constant voltage: 1.2V

Rotation: CW

P_b	EF	I	N
1	100	2000	6700
8.5	90	1900	3350
[W]	[%]	[mA]	r/min

— N: Speed
— I: Current
— P: Out power
— EF: Efficiency



Note: The above performance and characteristics are measured based on limited motor samples only.