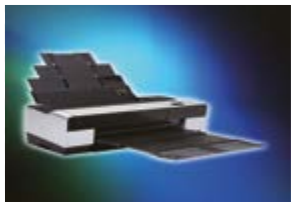


KOCO DC-MOTION

A VARIETY OF APPLICATIONS

PRECISION DC CORELESS MOTOR 1

BRUSHLESS DC MOTOR 2

ELECTRONIC SPEED CONTROLLER 3

PRECISION GEARMOTOR 4

PRECISION SERVO MOTOR 5

DC CORELESS MOTOR 6

FLAT DC MOTOR 7

DC CORE MOTOR 8

MINI STEP MOTOR 9

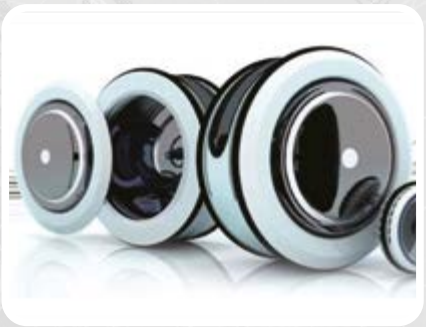
SONIC MOTOR 10

Overview of the FLAT DC MOTORS

	Motor No.	Dia x Length (max)	Max. Power	Page
1	**2007RFN**	20.00 x 7.20 mm	1.6 W	4
2	**0720RFN**	7.00 x 2.10 mm		5
3	**0820RFN**	8.00 x 2.70 mm		6
4	**0827RFN**	8.00 x 2.70 mm		6
5	**0834RFN**	8.00 x 2.70 mm		6
6	**1020RFN**	10.00 x 2.70 mm		7
7	**1027RFN**	10.00 x 2.70 mm		7
8	**1030RFN**	10.00 x 2.70 mm		7
9	**1034RFN**	10.00 x 2.70 mm		7
10	**1234RFN**	12.00 x 34.00 mm		8

FLAT DC MOTOR

The flat DC motor features a unique and practical design structure. The motor was awarded second prize for technological progress in a contest held in Shenzhen and was also granted a national patent. The motor is well suited for electronic products with limited space. Due to its small size and available built-in vibrator, the product is widely used in wearable health care products, mobile phones, and tablet PC's.



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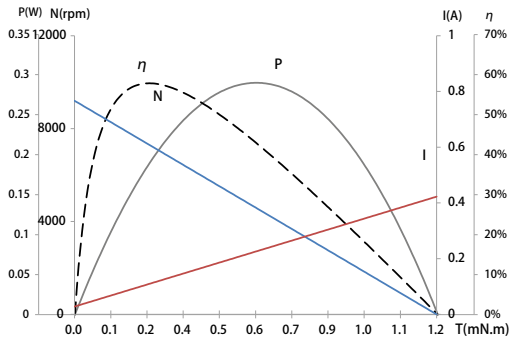
Precious Metal Commutation · **2007RFN**

Motor Characteristics			2007RFN01-40-3.0	2007RFN52-40-3.0
1	Voltage	V	3	3
2	Terminal resistance	Ω	7.1	1.6
3	No-load speed	rpm	9200	19000
4	No-load current	mA	28	80
5	Stall torque	mNm	1.2	3.2
6	Stall current	mA	420	1800
7	Load torque	mNm	0.3	0.3
8	Load speed	rpm	6850	17000
9	Load current	mA	130	300
10	Max. output power	W	0.29	1.6
11	Max. efficiency	%	58	81.4
12	Back-EMF constant	mV/rpm	0.30	0.15
13	Torque constant	mNm/A	3.00	1.90
14	Speed/torque gradient	rpm/mNm	7667	5938
15	Rotor inertia	gcm²	0.40	0.40
16	Weight	g	8.7	8.7
17	Operating temperature range	°C	-20 ~ +80	-20 ~ +80

Characteristics Curve Model 2007RFN01-40-3.0



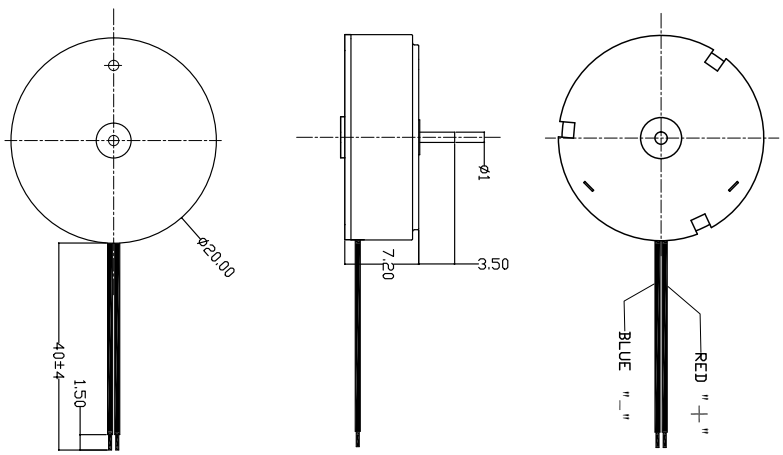
Applications

Mini electronic products, toys, etc.

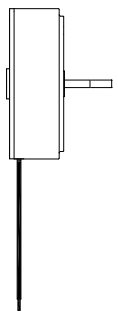
Options

- Lead wires length
- Special coils

Dimension (mm) · 2007RFN



Approx. actual size



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Precious Metal Commutation · **0720RFN**

Motor Characteristics			0720RFN31-12dp31-3.0
1	Voltage	V	3
2	Terminal resistance	Ω	54/100
3	Speed	rpm	10000
4	Current	mA	70
5	Starting voltage	V	1.5
6	Stall current	mA	90
8	Operating temperature range	°C	-20 ~ +70

Approx. actual size

Applications

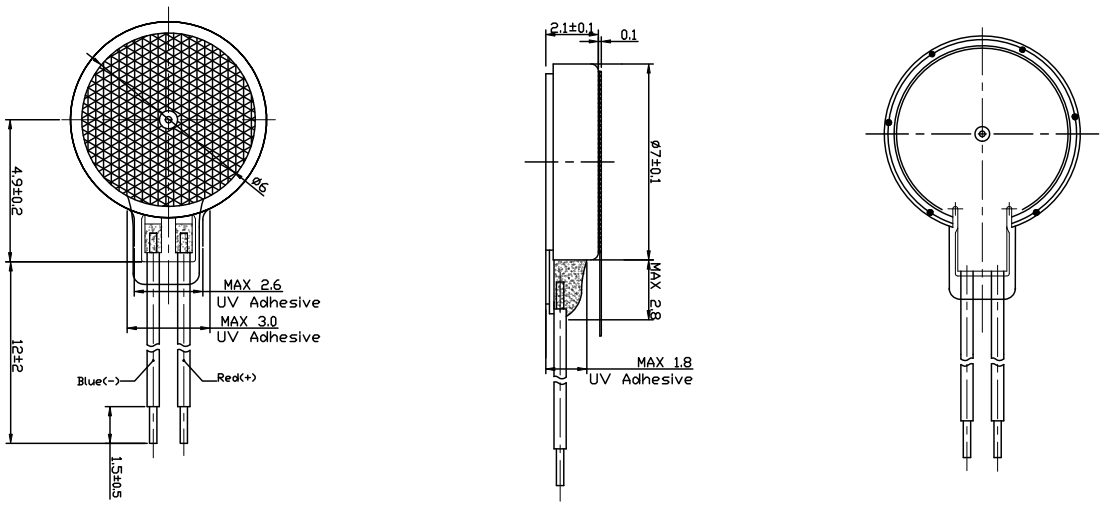
Wearable devices, health care equipment, etc.

Options

Lead wires length
Special coils

Dimension (mm)

Model 0720RFN31-12dp31-3.0



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Precious Metal Commutation · **0820RFN/0827RFN/0834RFN**

Motor Characteristics			0820RFN31-8d-3.0	0827RFN31-20d-3.0	0827RFN32-20d-3.0	0834RFN31-8d-3.0
1	Voltage	V	3	3	3	3
2	Terminal resistance	Ω	30/60	31/62	55/110	28/54
3	Speed	rpm	11000	11000	9000	11000
4	Current	mA	70	70	40	70
5	Starting voltage	V	1.5	1.7	1.7	1.7
6	Stall current	mA	90	80	50	90
8	Operating temperature range	°C	-20 ~ +70	-20 ~ +70	-20 ~ +70	-20 ~ +70

Approx. actual size

Applications

Wearable devices, health care equipment, etc.

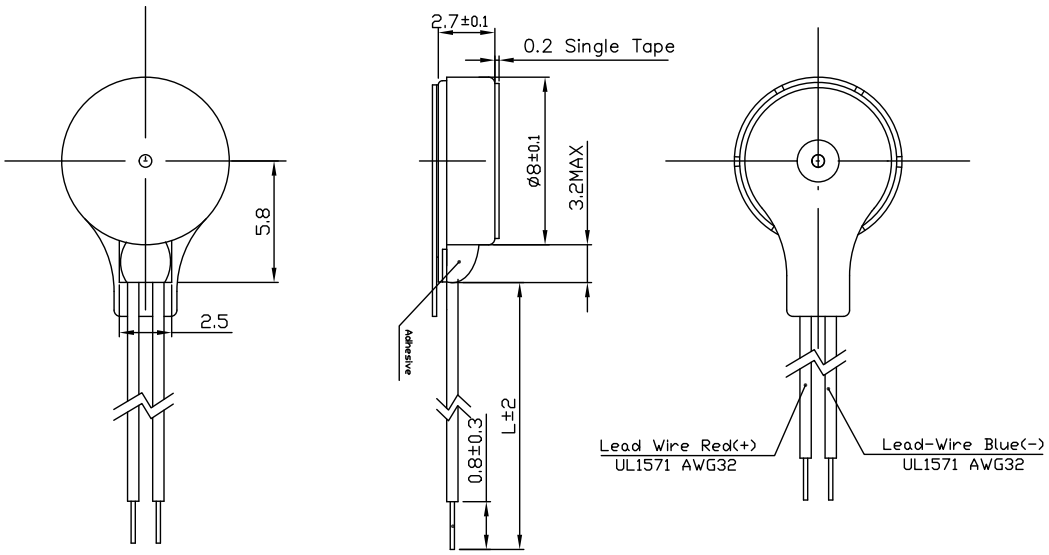
Options

Lead wires length

Special coils

Dimension (mm)

0827RFN31-20d3P4-3.0



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Precious Metal Commutation ·
1020RFN/1027RFN/1030RFN/1034RFN

Motor Characteristics			1020RFN31-17d-3.0	1027RFN31-17d-3.0	1030RFN31-17d-3.0	1034RFN31-17d-3.0
1	Voltage	V	3	3	3	3
2	Terminal resistance	Ω	30/58	35/66	38/71	32/63
3	Speed	rpm	13500	13500	13500	13500
4	Current	mA	60	55	55	70
5	Starting voltage	V	2.3	2.3	2.3	2.3
6	Stall current	mA	95	90	80	95
8	Operating temperature range	°C	-20 ~ +70	-20 ~ +70	-20 ~ +70	-20 ~ +70

Approx. actual size

Applications

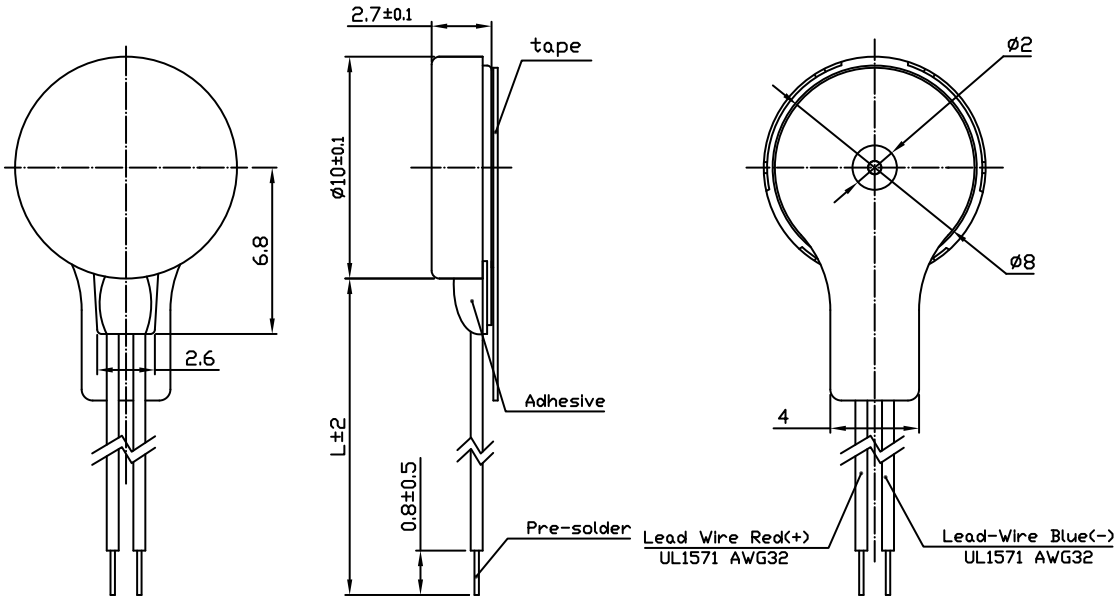
Wearable devices, mobile phones, tablet PCs, health care equipment, etc.

Options

Lead wires length
Special coils

Dimension (mm)

1027RFN31-17d3-3.0



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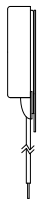
Precious Metal Commutation · **1234RFN**

Motor Characteristics			1234RFN31-110d-3.0
1	Voltage	V	3
2	Terminal resistance	Ω	32/59
3	Speed	rpm	11000
4	Current	mA	60
5	Starting voltage	V	1.7
6	Stall current	mA	90
8	Operating temperature range	°C	-20 ~ +70

Approx. actual size



Applications

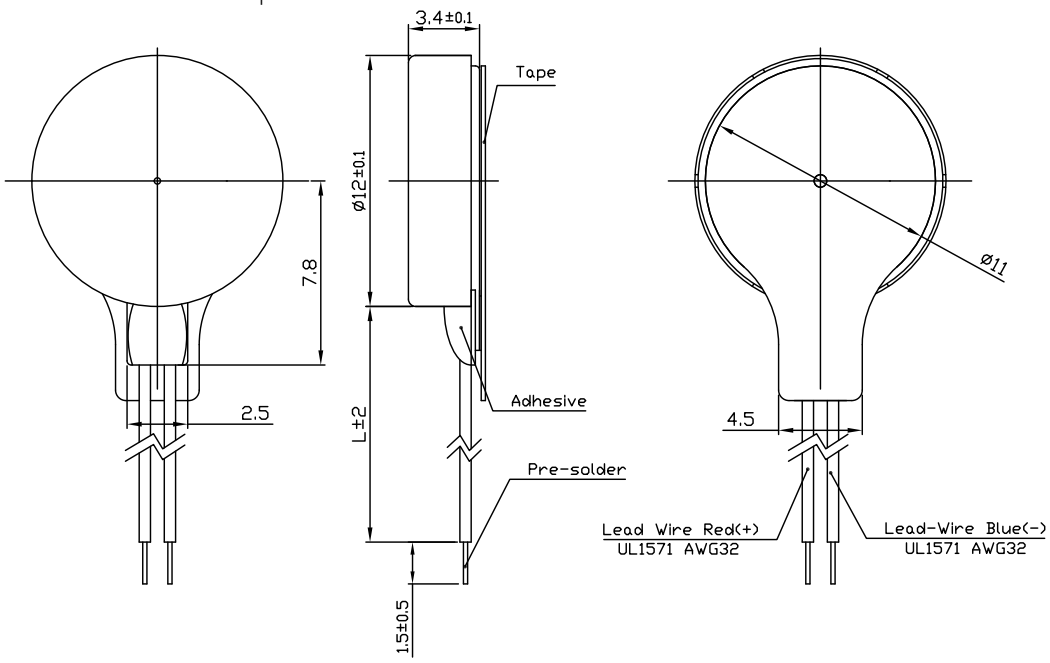
Interphone, gamepad, wearable devices, tablet PCs, health care equipment, etc.

Options

Lead wires length
Special coils

Dimension (mm)

Model 0720RFN31-12dp31-3.0



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