

New Haptics Products

PUI Audio is excited to announce an expansion to our Haptics product line by adding new Eccentric Rotating Mass (ERM) Haptics with higher energy efficiency, longer lifespan, and surface mount terminations.

PUI Audio's ERM Haptic actuators are small DC-driven motors that contain an off-axis mass attached to the motor's shaft. When DC voltage is applied to the motor, the rotation of the off-axis assembly produces a vibration in two axes- the strength and frequency directly correlate with the driving voltage.

Keeping the user experience in mind, our new Haptics motors deliver powerful tactile feedback to ensure clarity and seamless integration with end application.



Surface Mount Actuators



Directly mounted to the PCB of a product, these surface-mount actuators deliver strong haptic feedback in a tiny package. When designers aim to make the next generation of their development as compact as possible, choosing PUI Audio's Surface Mount ERM Haptics is a must.

Key Features

| Part | Dimensions (mm) <small>(L x W x H)</small> | Weight (grams) | Vibration (G _{RMS}) | Voltage (V _{DC}) | Current (mA) | Speed (RPM) |
|--------------------------------|---|-------------------|----------------------------------|-------------------------------|-----------------|----------------|
| HD-EMB1104-SM-2 NEW! | 11.0 x 4.4 x 3.4 | 0.6 | 0.35 | 2.7 | 85 | 14,000 |
| HD-EMB1104-SM-3 NEW! | 11.0 x 4.0 x 3.0 | 0.6 | 0.30 | 2.7 | 80 | 15,000 |
| HD-EMB1204-SM NEW! | 12.2 x 4.4 x 3.4 | 0.98 | 0.40 | 3.0 | 85 | 12,000 |

Key Applications

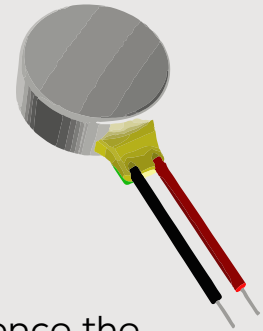
- **Small Medical Devices e.g-** insulin pump to notify patient for dosage.
- **Consumer e.g-** handheld Monitoring device for athletes to improve field performance.
- **Industrial/Security-** handheld radios or body worn devices to alert user.

Highlights

- **Surface mount motor directly soldered to the PCB board for easy implementation.**
- **Stronger Feedback.**

Brushless DC Actuators

Providing high power in a small package, Brushless DC ERM actuators feature improved speed and torque control compared to brushed actuators. These actuators offer a longer lifespan than brushed designs due to a lack of friction between brushes and a commutator. PUI Audio's Brushless DC Eccentric Rotating Mass haptics can save you time and money in maintenance and energy costs- try one today to experience the benefits of modern motor technology!



Key Features

| Part | Dimensions | | Weight (grams) | Vibration (G_{RMS}) | Voltage (V_{DC}) | Current (mA) | Speed (RPM) |
|---------------------------------|------------|-------------|-------------------|----------------------------|-------------------------|-----------------|----------------|
| | (mm) | (L x W x H) | | | | | |
| HD-EM0602-LW15-R NEW! | 9.0 | 6.0 x 2.55 | 0.95 | ≥ 0.3 | 3.0 | 90 | 15,000 |
| HD-EM0802-LW30-R NEW! | 11.0 | 8.0 x 2.5 | 0.95 | ≥ 0.3 | 3.0 | 90 | 15,000 |

Key Applications

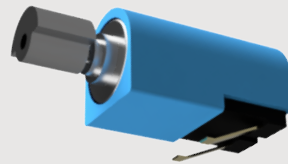
- High reliability applications like medical equipment
- Light wearable devices (fitness tracker, watches)

Highlights

- Brushless smallest motor with a built-in IC driver.
- High Reliability & durability.
- Lead wire motor attached for easy assembly.

Low Current Actuators

PUI Audio's new Low Current ERM actuators are one of our latest innovations in haptic technology. With the same high-quality feedback found in our other models, these actuators can extend the battery life of your product when power efficiency is critical. Featuring convenient spring contacts, PUI Audio's Low Current ERM actuators are a perfect choice for battery-powered devices such as wearables and IoT devices.



Key Features

| Part | Dimensions (mm) <small>(L x W x H)</small> | Weight (grams) | Voltage (V _{DC}) | Current (mA) | Speed (RPM) |
|--------------------------------|---|-------------------|-------------------------------|-----------------|----------------|
| HD-EMB1305-SC-R NEW! | 12.7 x 4.6 x 4.9 | 0.80 | 3.0 | 30 | 13,000 |

Key Applications

- Smart electronics battery operated handheld portable devices or IoT devices e.g- a smartphone or a toothbrush, a remote control, or a laser tag equipment
- Wearable monitoring devices in medical setting

Highlights

- Low current consumption.
- Spring Contact motor surrounded by a rubber boot for best assembly and vibrations.