

What's The BUZZ

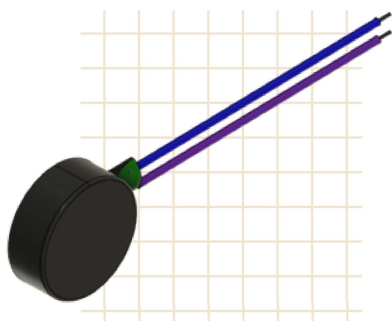
About Haptics




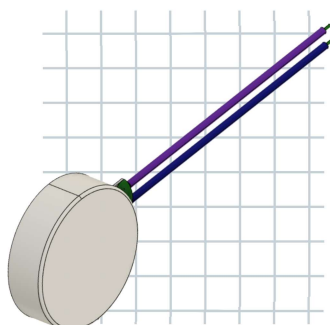
PUIaudio
WHEN IT NEEDS TO BE HEARD

The evolution of next-generation electronic components is driving haptic advancements and delivering tactile enhancements across a wide range of HMIs. As a leading expert and innovator in the audio electronics component space, PUI Audio is partnering with haptic device manufacturers in the medical, industrial, and security market sectors.

HD-EM0803-LW20-R



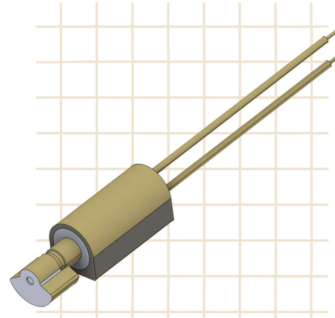
HD-EM1003-LW15-R



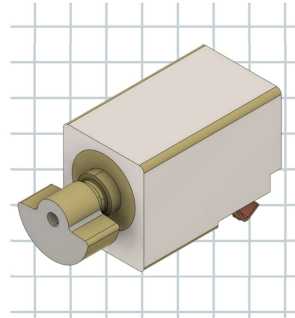
UI Audio's 8mm diameter by 3mm thick HD-EM0803-LW20-R is an eccentric rotating mass vibration haptic motor. Originally designed for use in pagers/beepers, this device is great for use in wearables for haptic feedback.

The most common method of making devices vibrate is a small, direct current (DC) motor (aka vibrate motor). A flywheel is mounted on a rotating shaft that passes directly through its center during normal operation, producing smooth rotation and no vibration. To create a vibration, an eccentric rotating mass (ERM) counterweight is added to the shaft to create an artificial imbalance.

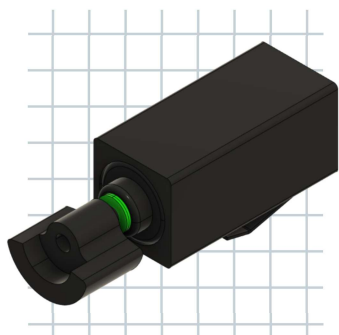
HD-EM1204-LW20-R




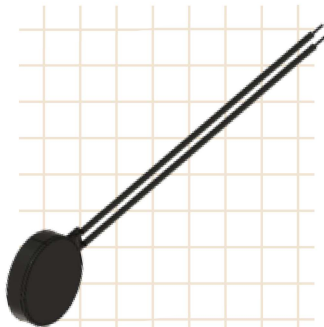
HD-EM1206-SC-R



HD-EM1204-SC-R



HD-EM0802-LW15-R



More advanced components are based on linear resonant actuator (LRA) technology, which is typically the size of a small coin. Instead of rotating an LRA vibrates in a single plane up and down to create carrying degrees of haptic response. LRAs are composed of a wire raid (aka voice coil), a small circular magnet, and a spring that is connected to the device enclosure. As the AC current passes through the coil, a magnetic field exerts varying degrees of force causing the magnet to move up and down. In turn, this mechanical movement exerts a force on the spring, creating a sense of vibration at a pre-set frequency.