

## Revolutionary High Definition Haptic

KEMET film actuators add haptic skin to any device embedded in product surface to create:

- Localized, independent sensations anywhere on the surface (flat, curved or flexible)
- Natural, organic, authentic touch sensations

## Typical Applications

Interaction with hands:

- Gaming and VR controllers including gloves
- Smart capacitive button: home speakers, trackpads etc.
- Mouse and keyboard with OLED display
- Localized haptic for fingerprint sensor

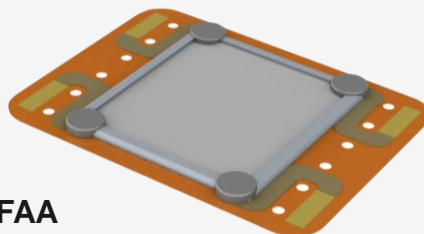


## Key Product Highlights

- Thin 150  $\mu\text{m}$
- Flexible and conformable
- High displacement: 250  $\mu\text{m}$

# FFAA Film Flex Assembled Actuator

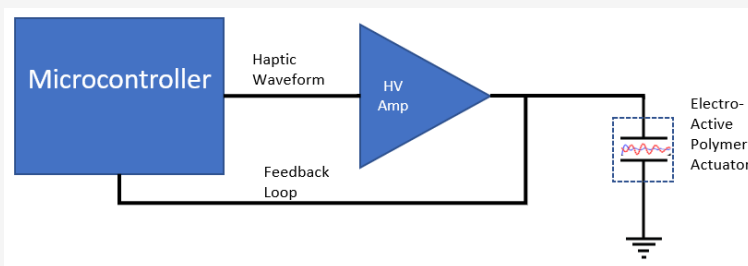
## Product Specifications



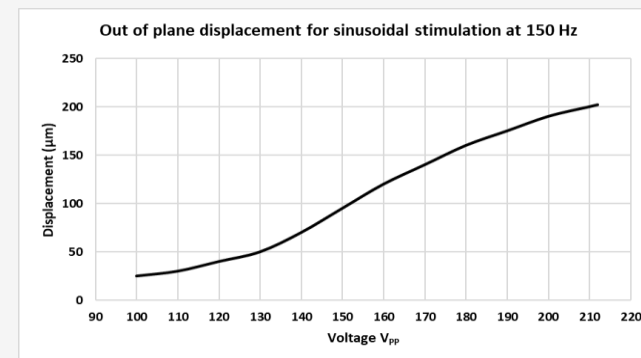
FFAA

Parameter	Value	Unit
Size	14.1 x 18.5	mm
Thickness	0.6	mm
Weight	76	mg
Operative Voltage	212@ 150Hz	Vpp
Frequency range	10 – 500	Hz
Out of plane displacement	$\approx$ 200	$\mu\text{m}$

## Driver Circuit



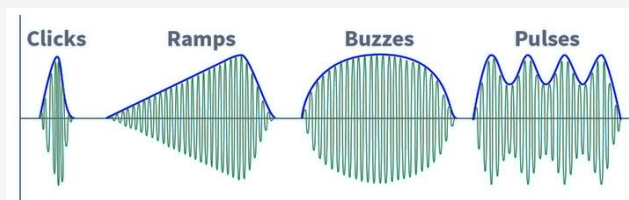
## Displacement Magnitude



## Driving IC MICROCHIP

- **Master IC (HV56020)** - Scalable if additional power is required for simultaneous drive of multiple channels
- **Slave IC (HV56022)** - Additional IC can be added to drive further channels to be driven time-sliced versus those drawing power
- Overvoltage Protection / Undervoltage Protection / Short – Circuit Protection

## Effect Design



- Library of haptic effects
- Software tools to enable simple effect designs