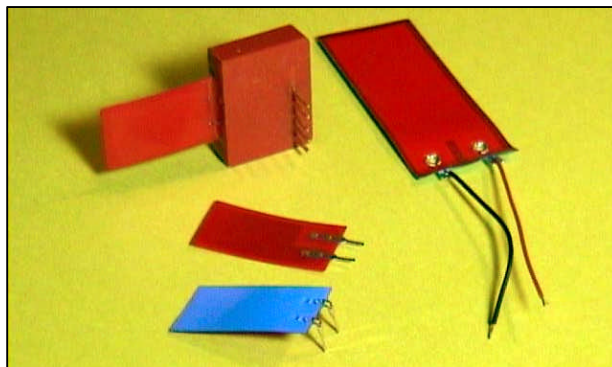
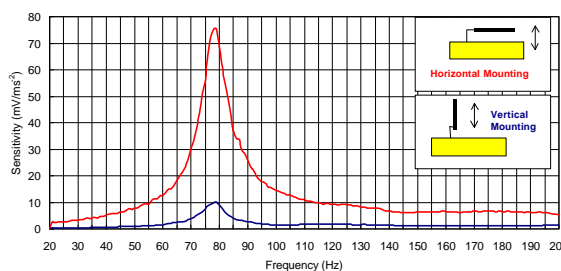


## Piezoelectric Film Sensors

Pro-Wave now presents a series of mechno-electrical sensors and detectors produced by advanced piezoelectric polymer film technology. The polymer film of polyvinylidene fluoride (PVF2) exhibits a conspicuous piezoelectric effect and also has high compliance comparing with other piezoelectric crystals or ceramic materials. Because of its superior piezoelectric strain constant (g value), 10-20 times larger than piezoelectric ceramic, it is an ideal sensing material for converting mechanical to electrical energy.



### Frequency response



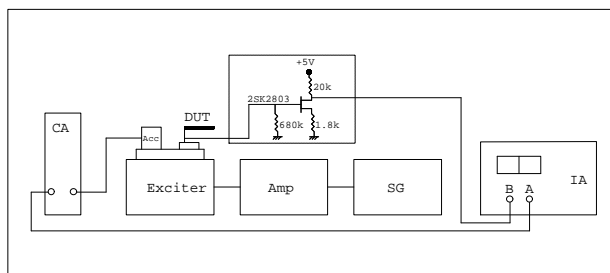
### Features

- High Mechno-electrical efficiency in planar, thickness and hydrostatic modes
- Low mechanical and acoustic impedance
- High resistance to moisture
- Pliant, flexible, tough and lightweight
- Self-generated voltage, non-contact, rustless, free of sparking

### Applications

- Vibration sensors and motion detectors
- Low weight accelerometers
- Pressure or force sensors
- Keyboards, keypads and touch panels
- Coin and impact sensors
- Microphones and headset speakers
- Other mechno-electrical and electro-mechanical devices

### Measuring diagram



**SG:** Programmable Signal Source HP 8165A

**Amp:** Power Amplifier

**Exciter:** Exciter B&K 4809

**Acc:** Accelerometer B&K 8309

**DUT:** Device (FS-2513P) under test

**CA:** Charging Amplifier B&K 2635

**IA:** Impedance Analyzer HP4192

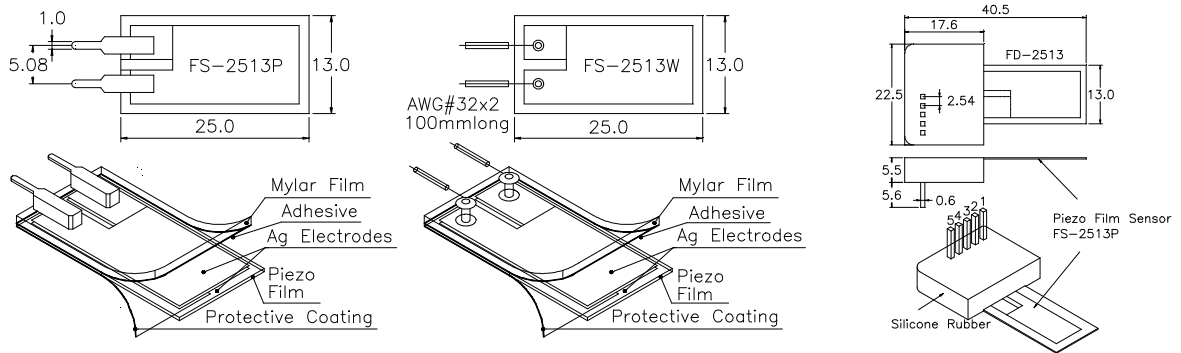


# Piezoelectric Film Sensors

## Specifications

Model Number	FS-2513P		Unit
Type	Lead Pins		-
Voltage sensitivity at fr	70		$\text{mV}/\text{ms}^{-2}$
Transverse sensitivity	10		$\text{mV}/\text{ms}^{-2}$
Resonant frequency (fr)	$80 \pm 10$		Hz
Capacitance	$1.5 \pm 30\%$		$\eta\text{F}@1\text{KHz}$
Operation voltage (Vcc)	-		DC volts
Operation current	-		mA
Max. output current	-		mA
Operation temperature	-20 - +60		$^{\circ}\text{C}$
Storage temperature	-40 - +70		$^{\circ}\text{C}$

## Dimensions in mm



## Driving circuit & pin assignment of model FD-2513P

