

Piezoelectric PVDF Films with Electrode

PolyK has PVDF piezo films with electrodes in stock for immediate purchases. Most common ones are rated for 65 °C, 100 °C, or 125 °C operation. We also provide 160 °C-Grade piezo PVDF and PVDF-TrFE copolymer films with the latter having significantly better piezo responses.

If you need to remove part of the electrodes to produce your own sensors, you can use a chemical (called “etchant”) to do so. When you cut a big film into small pieces, you may find short-circuits of top and bottom electrodes around the edge (especially for thin films), you can also use an etchant to clear the short circuits.

Electrode	PVDF thickness	Etchant
Cu/Ni (R2R vacuum sputtered, 80 nm-200 nm thickness)	28 μm , 45 μm , 50 μm , 110 μm , 120 μm	Aqueous ferric chloride (FeCl_3) solution
Al (R2R sputtered, 30-100 nm)	7 μm , 11 μm , 16 μm , 28 μm , 32 μm , 45 μm , 50 μm , 75 μm , 100 μm , 120 μm , 200 μm 100-500 m long rolls	Dilute aqueous HCl, KOH, or NaOH solution
ITO (R2R optically transparent)	28 μm , 40 μm , 50 μm , 75 μm , and 100 μm	Dilute aqueous HCl solution
Ag (screen printed, 3-8 μm)	28 μm , 45 μm , 100 μm , 120 μm , 200 μm 200 mm x 280 mm sheet	Acetone, IPA
Au, Pt	8 μm to 500 μm , size up to 360 mm x 360 mm sheets	For Gold, please use “Antistrumin, Potassium monoiodide”
Customized	http://piezopvdf.com/piezo-pvdf-film/metallized/	

