Abstract: The hybrid double layer film consisting of PTFE and P(VDF-TFE-HFP) is prepared by casting the P(VDF-TFE-HFP) on the surface of Teflon PTFE film. The piezoelectricity of the double layer film is investigated by means of constant voltage corona charging with a grid, measurements of isothermal surface potential decay and isothermal d_{33} coefficient decay. The results point out that both piezoelectricity and thermal stability of P(VDF-TFE-HFP)/PTFE double layer film are much better than that of PVDF