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Comparison of Shock Loading traces obtained from PVDF stress gauges and VISAR¹ CHRISTOPHER NEEL, NARESH THADHANI, Georgia Inst. of Technology, Matl Sci & Eng. Dept. — Parallel plate impact tests were performed on solid THV polymer (tetrafluoroethylene – hexafluoropropylene – vinylidene fluoride), as well as two well characterized polymers, PTFE and PMMA. Simultaneous time-resolved measurements at the interface between the polymer and fused silica were performed using PVDF stress gauges and VISAR probes. The effect of shielding to eliminate the effect of stress-induced polarization on the PVDF gauges is presented, and differences in the loading traces for the two measurement probes are discussed.

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