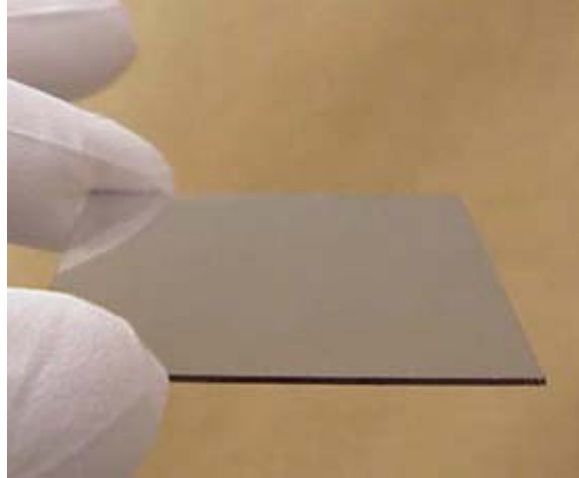


## MicroWires™ Polarizer, Power Plus Series

Archer OpTx is producing Power Plus Series (PPS) MicroWires™, a linear polarizer employing the proven technology of aluminum MicroWires as a transmissive polarizer plus performance enhancements which increase power handling and mechanical durability. The desired transmission is passed and the unwanted polarization is reflected, not absorbed.



Careful selection of the materials used in the manufacture of the product provides the highest possible thermal stability from the substrate, making it suitable for much higher power applications than polarizers made with conventional glass substrates. A matched protective layer is applied to protect the MicroWires so that the product can be handled with normal levels of care without compromising the power-handling capabilities of the polarizer.

Nominal transmission efficiency of uncoated PPS polarizers is 80% and can be improved by anti-reflection coatings, applied to order. The polarizers are intended for use at normal incidence.

Typical polarization contrast at 650 nm is 500:1; the contrast is wavelength dependent and generally increases with wavelength. Standard PPS polarizers are intended for visible-NIR applications, although special order products are available that extend performance into the UV.

The polarizers are 1 mm thick and are available in a variety of shapes—rectangular, triangular and round. Typical dimensional tolerances are approximately  $\pm 0.4$  mm for linear cuts, somewhat looser for round parts.

MicroWires™ is a trademark of MOXTEK, Inc. Photograph courtesy of MOXTEK.