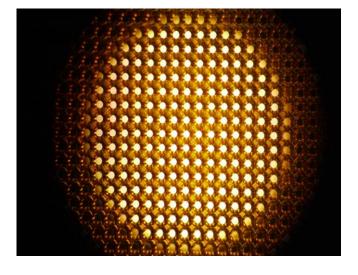


355 nm DPSS LASER KAPTON®/SOFT MARK and Drilling





Kapton® is used as a substrate in the flexible printed circuit (FPC) industry. Its long flex life and ability to withstand copper etching makes it an excellent choice for these applications. FPC film is used heavily in the electronics market as the industry moves to smaller, lighter and faster components.

DPSS Model 3510-30 UV lasers are able to affect a mark on Kapton® via a "Cold Marking" process, which virtually eliminates the thermal damage typically encountered with longer wavelength lasers. In addition, the UV wavelength can be focused to spot sizes of a few microns, enabling the precision drilling and cutting of very small features, critical for the microcircuits used in today's miniature devices.

Using the Model 3510-30 focused to a 30 um beam diameter, 40 micron holes on 80 um centers were drilled a rate of 800 mm per second.

Laser Model	Average Power	Rep Rate	Scan Rate
3510-30	1 Watt @ 355 nm	30 kHz	0.8 to 1 meters/sec