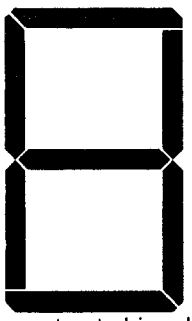
A DRIVER EDUCATION COURSE FOR DESIGNERS USING LARGE AND BRIGHT DISPLAYS.

Today's bigger, brighter displays need high voltage drivers.



Are you designing a medical instrument that must catch the eye of a busy nurse from across a hospital ward? Or a critical cockpit readout that pilots must read in direct sunlight? Or a control panel for a nuclear power plant where one display must out-shine all others? Or perhaps a digital scale, taxi meter, cash register or gas pump?

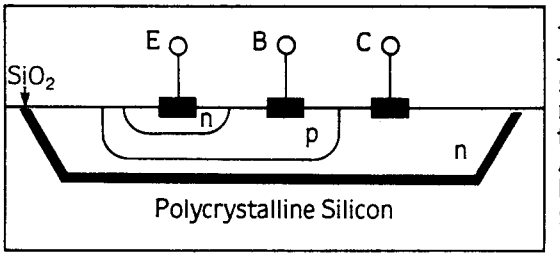
If you are one of the growing number of engineers facing these challenges, it's time you got to know a company named Dionics; and learned more about our monolithic high voltage drivers. They are the most reliable, straightforward way to take a TTL or MOS signal and drive a large and/or bright display.

Dionics: high voltage and high reliability.
Dionics has sold literally millions of high voltage drivers for every kind of display: gas or plasma discharge, vacuum fluorescent and electroluminescent up to 3 inches high. They drive digital and alphanumeric readouts, dot matrix panels, bar graph displays and more, with voltages to 280V. And they have earned the highest praise for quality and dependability from the industry's leading manufacturers.

The trouble with junction isolation.
Other manufacturers attempt to use a conventional technique called junction isolation to make their drivers. This method — while quite simple and relatively inexpensive — has an unavoidable shortcoming. As voltages approach 100V, the isolation between separated components begins to break down.

There are possible solutions to this problem, but they are all less than ideal. They tend to be technically or economically impractical at the manufacturing level. And at the design and application level, they clutter up board layouts, run up assembly costs and double or triple the chances of a component failure.

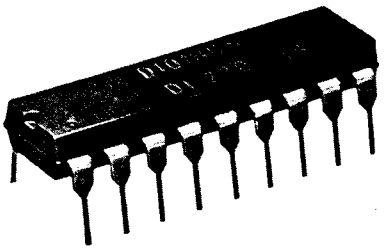
Dionics' bright idea: dielectric isolation.
At Dionics, we manufacture our high voltage drivers using a technique called dielectric isolation. The various components within the monolithic circuit are isolated from each other in silicon dioxide (SiO_2); a form of quartz with all the electrical insulating properties of glass. You can use much higher voltage levels and eliminate the potential failure points created by the second "P" level found in junction isolation.



With dielectric isolation, circuit design proceeds as with totally discrete devices. There is no worry about interaction between components.

The breakdown voltage with dielectric isolation is typically greater than 500V. So designs, even those requiring outputs above 250V, remain simple, uncluttered, elegant. Lower parts counts, reduced production costs and dramatically improved reliability result.

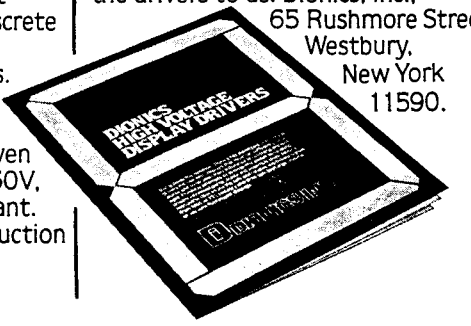
Dionics drivers pay for themselves.
The advantages of Dionics high voltage



drivers do not come free. Manufacturing with dielectric isolation does cost a bit more than conventional techniques.

But consider the advantages of a clean, simple design — and the cost of even one service call to track down and replace a failed driver — and the conclusion is inescapable. A small initial investment in Dionics drivers pays for itself many times over.

Send for our enlightening new catalog.
If you are now, or may soon be, designing products with large or bright displays, you should have a copy of our new High Voltage Drivers Catalog. Use the reader service card, drop us a line or call, right now, (516) 997-7474. Then go ahead and make the displays as big and bright as you like. And leave the drivers to us. Dionics, Inc., 65 Rushmore Street, Westbury, New York 11590.



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