

FETRON, solid state vacuum tube replacement

VACUUM TUBE TO FETRON

Prior to the development of the transistor, and particularly the high voltage JFET, electronic equipment for many applications was engineered with the vacuum tube as the principle active element. In spite of the instabilities and short life of the vacuum tube, much existing equipment, particularly telephone carrier equipment, is well designed and will last for many more years if properly serviced.

However, the servicing cycle for vacuum tube equipment is very expensive, requiring frequent adjustment and periodic tube replacement to minimize down time. As a result, most existing vacuum tube equipment is scheduled to be replaced by new all solid state equipment. But new equipment is also very expensive and requires large capitalization in most cases. Replacement of obsolete vacuum tube equipment has therefore been delayed.

As a solution to this problem, Teledyne has developed the FETRON for direct plug-in replacement of vacuum tubes in the field. This allows the vacuum tube equipment user to reap many of the benefits of all solid-state equipment without having to incur the expense of complete new systems. The FETRON provides improved equipment performance, and drastically reduces servicing costs and electric bills from the date of installation.

In high utilization equipment, such as telephone carriers, the FETRON can pay for itself within six months of installation. Dollar savings from the first year can then be applied toward more sensible long term equipment plans and for greater return on investment.