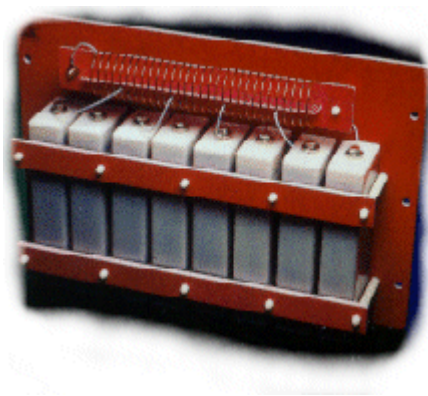




PFN



PULSE FORMING NETWORKS (PFN)

Pulse forming networks are designed for use in circuits which convert direct or alternating current to uni-directional square wave pulses of high energy for a short duration.

The PFN can be fabricated on a polyester glass mat laminate board (UL approved) and consists of an air cored inductor with a series of tappings to a bank of capacitors. Alternatively, the PFN can be housed in a more conventional steel container. The network can be designed to operate in air or under oil.

Applications:

Radar; Radiotherapy; Xray; Thyatron circuits.

Ordering information

Hivolt manufacture an E type network. The E type network is defined as having equal capacitance per mesh and mutual inductance between adjacent coils. The energy stored in the network will be completely dissipated into the load when the characteristic impedance of the network equals that of the load.

To help Hivolt assist you with your PFN inquiry please obtain as much of the information requested below as possible. Refer to Fig 1 for definitions.

1. Peak charging voltage
2. Pulse duration
3. Pulse rise time
4. Characteristic impedance and tolerance
5. Repetition rate
6. Maximum ripple allowable
7. Temperature range - operational and storage
8. Operational life required
9. Decay or fall time
10. Vibration and shock requirements
11. Altitude of operation

12. Forced or natural air circulation
13. Number of terminals required
14. Approximate dimensions
15. Mounting brackets required
16. Environmental requirements
17. Mechanical requirements

Typical pulse shape is shown in fig 1

