

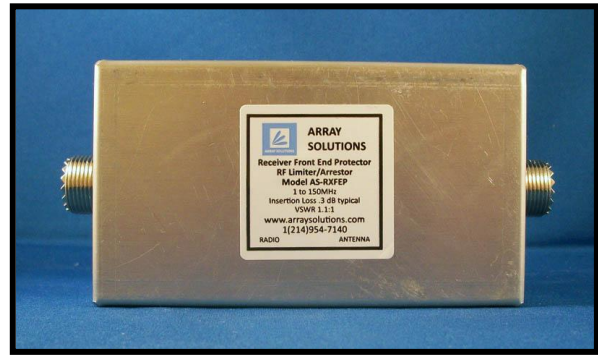


ARRAY SOLUTIONS

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AS-RXFEP HF, VHF, UHF RX Front End Protectors

HF, VHF, and UHF Receiver protectors' limits input RF signal threshold from 1 to 150MHz to less than 0.3Vrms to protect receiver front end from damage due to nearby transmitted fields. Receiver still acts normally and measured signal strength is not affected.

Circuit uses a multi-stage design of transformer saturation coupling and current limiters. They also incorporate a low voltage GDT to protect from lightning events. These are receive only you cannot transmit through them without damaging the unit.

The model AS-RXFEP RF limiter consists of a high voltage blocking capacitor input, two impedance converting broadband transformers and low-capacitance limiter diodes. The circuit is constructed to transform the 50 or 75 ohm input impedance in a broadband configuration where the diodes limit the applied signal to about .5 volt. The signal is then transformed back to 50 ohms to the output of the device.

When large signals are presented to the unit the input transformer saturates instantly, an increase in input VSWR occurs, and the balance of input signal is reflected back toward the source. For this reason power handling capacity is mostly irrelevant, but the components used can handle 10 watts ICAS. Impedance of other signals at lower levels are undisturbed. Insertion loss 1. MHz to 150 MHz is typically .3dB. Limiting begins and holds at approximately .3 volts constant.

The limit specification of .3V RMS is 0 dBm into 50 ohms.

The transformers used also provide circuit isolation which **prevents extraneous diode detection effects**. Circuit components and chassis easily handle the noted environmental conditions.

Use these devices for all receivers, especially the new broadband super-sensitive solid state units.

Size 2X2X4" (50x50x100mm) .2 lb

SO239 connectors ONLY. Use of RCA or BNC adapters to prevent accidental hooking unit to a transceiver output is highly recommended.