



RF SIGNAL SELECTOR QA014

FEATURES:

- E.W. BUILDING BLOCK DESIGNED FOR FIXED WING FIGHTER OR ATTACK HELICOPTER ENVIRONMENTS
- FULLY INTEGRATED WITH OTHER FILTRONIC E.W. BUILDING BLOCKS
- BUILT IN LIMITER PROTECTION
- SELECTABLE INPUTS FOR SIGNAL, B.I.T. OSCILLATOR OR WIDEBAND NOISE
- CURRENTLY IN PRODUCTION

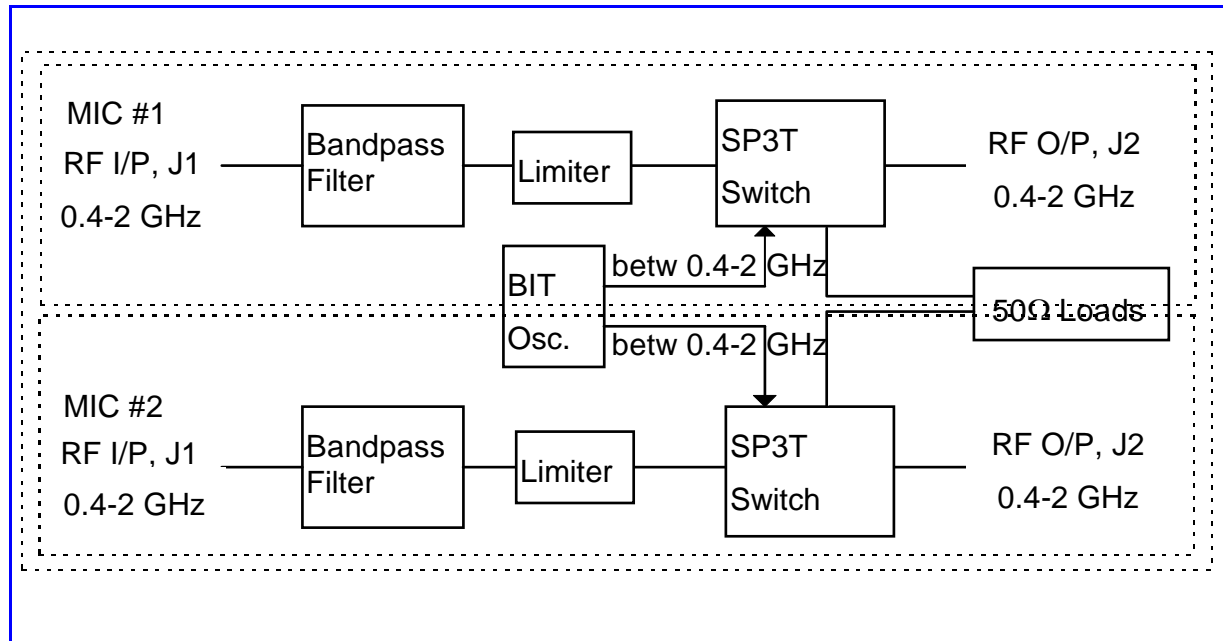
DESCRIPTION:

The QA0014 is a broad band signal selection device intended to be used as the low band filtering device at the RF front end of a RWR/ESM receiver. It comprises two identical receivers. Each channel features a highly selective low loss SSS filter which selects a 0.4-2GHz signal from the user's antenna. The signal is output to the receiver chain which may comprise DLVA and IFM or SHR. FCL manufactures a family of receiver building blocks which may be cascaded for this purpose.

Receiver protection is provided by integral PIN diode limiters and BITE is provided via an internal oscillator to allow testing and calibration of the subsequent receiver chain.

The device exhibits excellent performance tracking and is built to withstand the rigours of fixed wing fighter or attack helicopter environments.

FCL manufactures two other such assemblies, the QA013 which has two separate 2-8 and 8-18 GHz antenna inputs and incorporates band defining filters and the QA012 which is a diplexed receiver designed to cover the 2-18 GHz band.

CHARACTERISTICS

QA014 CIRCUIT TOPOLOGY
Performance Summary:

| | |
|------------------------------|------------------------------------|
| Input Frequency: | 0.4-2 GHz |
| Stopbands | DC-0.2 and 4-6 GHz |
| Stopband Isolation | 60 dB |
| Insertion Loss | 5 dB nominal |
| Population tracking | 1 dB |
| Peak Power Protect | 200W 1 microsec PW .2% duty |
| BITE | Each band +/-0.5% accuracy |
| Operating Temperature | -54 to +85C |