



HYBRID RECEIVER MSR003

FEATURES:

- ROBUST CONSTRUCTION FOR FIXED WING FIGHTER OR ATTACK HELICOPTER PLATFORM.
- INTERFACES WITH OTHER FCL BUILDING BLOCKS
- PROVIDES CRYSTAL VIDEO RECEIVER & SUPERHET. RECEIVER OUTPUTS SIMULTANEOUSLY
- CURRENTLY IN PRODUCTION

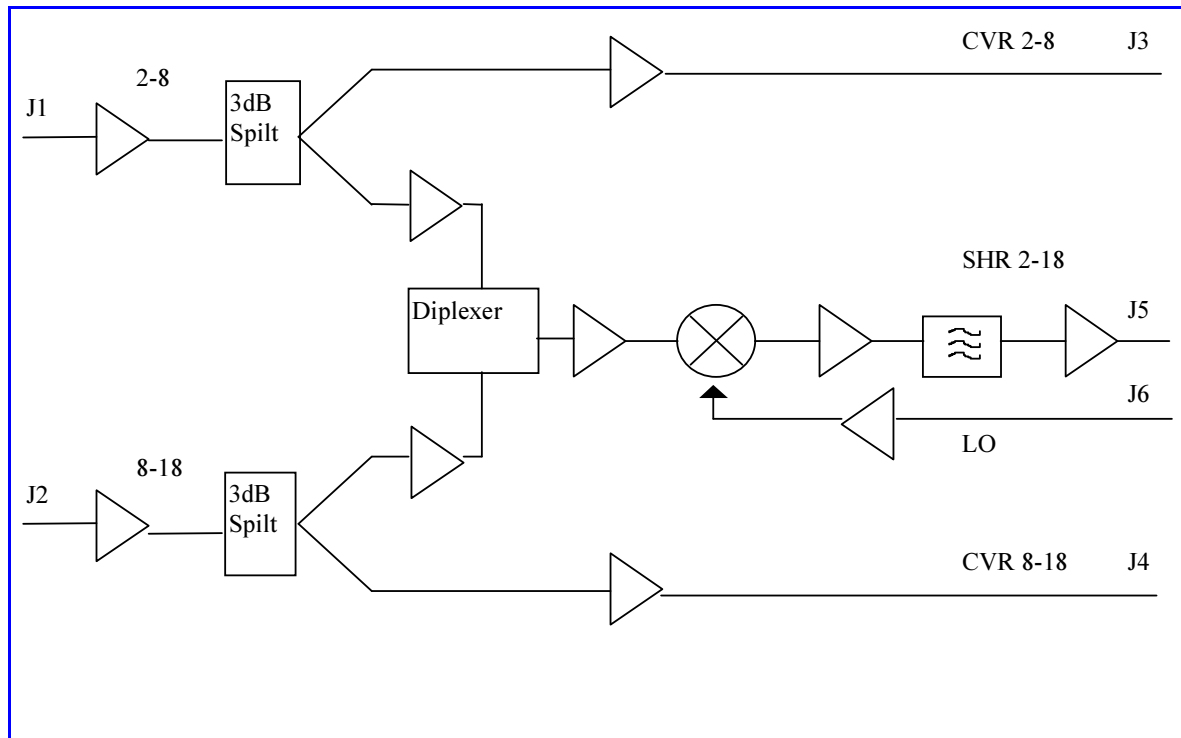
DESCRIPTION:

The MSR003 is a dual channel hybrid receiver operating in the 2-8 and 8-18 GHz bands. It consists of a pair of channels whose input comes from a preceding filter conditioning module FCL type QA012 or QA013. Each channel accepts an input signal and amplifies it before splitting it two ways. One path leads to an RF output which serves as a CVR channel output for termination in a DLVA e.g. FCL type RV057. The other path is combined with signals from the other RF input and the resultant is fed to a mixer. An externally applied LO signal downconverts the signal to a 160MHz IF. The signal is filtered an output for further measurement with e.g. an IF Log Amplifier.

The receiver and other FCL building blocks may be used in fixed wing fighter and rotary wing RWR/ESM applications.

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

FCL manufactures another such assembly, the MSR004 which has two identical 0.4-2GHz inputs and outputs Crystal Video Receiver signals at 0.4-2 GHz and at a 160MHz IF for a Superhet. Receiver channel.

CHARACTERISTICS

Performance Summary:

Input Frequency:
CVR channel gain

NF
P1dB

IF

LO

IF channel gain

NF

P1dB

Population tracking

Operating Temperature

2-8 and 8-18GHz

20dB nominal

5.5 dB

17 dBm nominal

160 MHz 23 MHz 3dB BW

1.83-18.17 GHz 0 to +5 dBm

33 dB nominal

7.5dB

7 dBm nominal

2dB

-54 to +85C