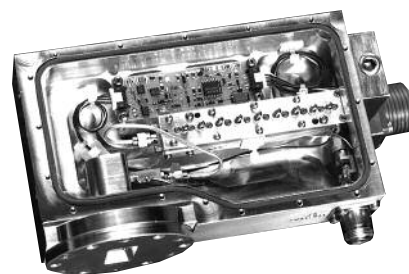


ULTRA-LOW NOISE X-BAND SATCOM LNA

FEATURES

- Noise temperatures from 45 K
- 7.25 to 7.75 GHz operation
- Integrated 11-section transmit reject filter
- WR137 or WR112 waveguide input with moisture seal



JPW4-07250775-45K-S

Fully militarized, this amplifier is supplied in a rugged chassis complete with an integrated fault alarm circuit and multipin connector capable of meeting all of the requirements of remote terminal applications. The weatherproof chassis is sealed to withstand 25 PSI, and is supplied with a waveguide moisture seal for operation in the most adverse environments.

SPECIFICATIONS

PARAMETERS*	JPW4-07250775-45K-S	JPW4-07250775-55K-S	JPW5-07250775-45K-S	JPW5-07250775-55K-S
Frequency	7.25–7.75 GHz	7.25–7.75 GHz	7.25–7.75 GHz	7.25–7.75 GHz
Gain (min.)	40 dB	40 dB	50 dB	50 dB
Gain window vs. temp. and freq. (max.)	3 dB	3 dB	3 dB	3 dB
Noise figure (max. at 23°C)	45 K	55 K	45 K	55 K
Input/output VSWR (max.)	1.25:1/1.35:1	1.25:1/1.35:1	1.25:1/1.35:1	1.25:1/1.35:1
Output power at 1 dB compression (min.)	7 dBm	7 dBm	7 dBm	7 dBm
Output third order intercept point (typ.)	17 dBm	17 dBm	17 dBm	17 dBm
Phase linearity per 40 MHz (max.)	±1°	±1°	±1°	±1°
Gain linearity per 40 MHz (max.)	±0.15 dB	±0.15 dB	±0.15 dB	±0.15 dB
1°/dB AM/PM conversion, input (min.)	-50 dBm	-50 dBm	-60 dBm	-60 dBm
Out-of-band gain at 7.9 GHz (max.)	15 dB	15 dB	15 dB	15 dB
DC power at 15 volts (typ.)	150 mA	150 mA	160 mA	160 mA
Operating temperature range	-57 to +60°C	-57 to +60°C	-57 to +60°C	-57 to +60°C
Outline drawing	See page 39			

* Electrical parameters are specified at 23°C.

