



SPC ELECTRONICS CORPORATION

C Band LNA Specification
Model EAM-A-360

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1.0 SCOPE

This document describes a Low Noise Amplifier (LNA). The LNA shall operate across the 3.4 to 4.2 GHz band. Unless otherwise specified, these specifications apply over the normal temperature and humidity.

2.0 ELECTRICAL SPECIFICATION

- 1) Frequency : 3.4 to 4.2 GHz
- 2) Bandwidth : 800 MHz
- 3) Gain : 45 dB min (47 typical)
- 4) Out of Band Gain : 0 dB @ 5.925 - 6.425 GHz
- 5) Gain Flatness : 3 dBp-p max @ 800 MHz
- 6) Gain Slope : 1 dBp-p max @ 40 MHz
- 7) Noise Temperature : 55 K max @ +23°C
- 8) Input Return Loss : 5 dB min. (w/o Isolator)
- 9) Output Impedence : 50 ohm nominal
- 10) Output Return Loss : 10 dB min.
- 11) 1dB Gain Compression Point : 0 dBm min.
- 12) Input DC Voltage : +12 to +18V
- 13) DC Current : 120 mA max.

3.0 MECHANICAL SPECIFICATION

- 1) Input Flange : CPR-229G
- 2) Output Connector : Type N, Female
- 3) Input DC Power : Through Output Connector
- 4) Size : approx 65 x 140 x 40 (mm)
- 5) Weight : 430g approx.
- 6) Color : White, Munsell N9.5 semigloss
- 7) Marking (Label) : Label Artwork TBD

4.0 ENVIRONMENTAL SPECIFICATION

4.1 OPERATING ENVIRONMENT

- 1) Temperature : -40 to +55°C
- 2) Relative Humidity : Up to 100% including condensation and frost
- 3) Rainfall : 4.00 inch/hour with wind speed 45 miles/hour, gusts to 60 miles/hour

4.2 NON OPERATING ENVIRONMENT

- 1) Temperature : -40 to +55°C
- 2) Relative Humidity : Up to 100%, including condensation and frost