LD-5S series C-Band Line Driver Amplifiers (LDAs) are specifically designed for use in satellite earth stations and general purpose telecommunications applications.

Utilizing proven GaAs FET technology, these amplifiers have been designed for reliable operation in both fixed and transportable applications.

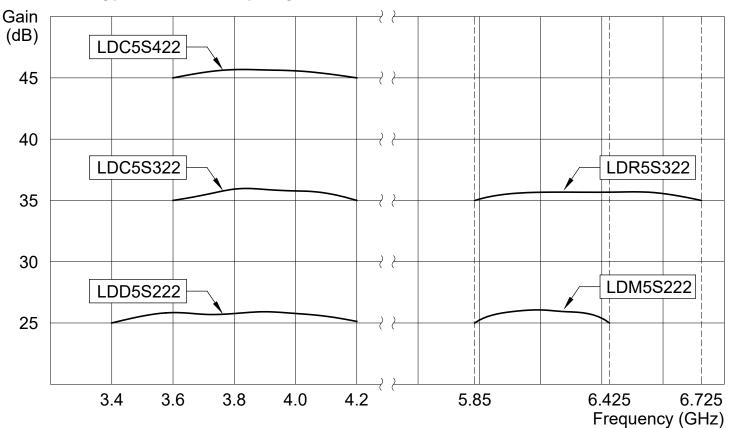
FEATURES:

- GaAs FET design
- Internal regulator
- Reverse polarity protection
- Input/output isolators
- High reliability
- SMA (F) connectors

OPTIONS:

- 22, 32, or 42 dB minimum gain
- +20 or +25 dBm min. output power at P1dB
- Transmit or receive frequency bands

LD-5S Series Typical Gain vs. Frequency

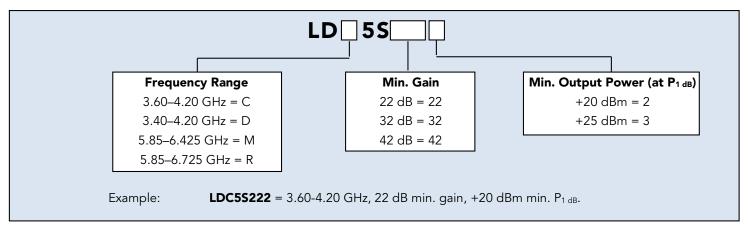




System Specifications

Parameter	Notes	Specification
Frequency Range	Band "C" Band "D" Band "M" Band "R"	3.60 to 4.20 GHz 3.40 to 4.20 GHz 5.85 to 6.425 GHz 5.85 to 6.725 GHz
Gain	"-5S22x" "-5S32x" "-5S42x"	22 dB min., 25 dB typical 32 dB min., 35 dB typical 42 dB min., 45 dB typical
Gain Flatness		±0.5 dB max. over the full band ±0.2 dB max. per 40 MHz
Noise Figure		2.7 dB typical, 3.5 dB max.
Power Output at 1dB compression (P _{1 dB})	"-5Sxx2" (Standard) "-5Sxx3" (High Power)	+20 dBm min., +21 dBm typical +25 dBm min., +26 dBm typical
3 rd Order Output Intercept Point (OIP ₃)	"-5Sxx2" (Standard) "-5Sxx3" (High Power)	+30 dBm min., +31 dBm typical +35 dBm min., +36 dBm typical
Group Delay per 40 MHz	Linear Parabolic Ripple	0.03 ns/MHz max. 0.003 ns/MHz ² max. 1.0 ns peak to peak max.
VSWR	Input Output	1.25:1 typical, 1.35:1 max. 1.25:1 typical, 1.35:1 max.
Maximum Input Power	Damage threshold	+10 dBm max.
Connectors	Input/Output Power	SMA Female RFI Filter Solder Terminal
Power Requirements	Voltage Current (Standard) Current (High Power)	11 VDC min., 12 VDC typical, 16 VDC max. 200 mA typical, 250 mA max. 300 mA typical, 350 mA max.
Temperature Range	Operating: case	0°C to +60°C

Part Number Ordering Information







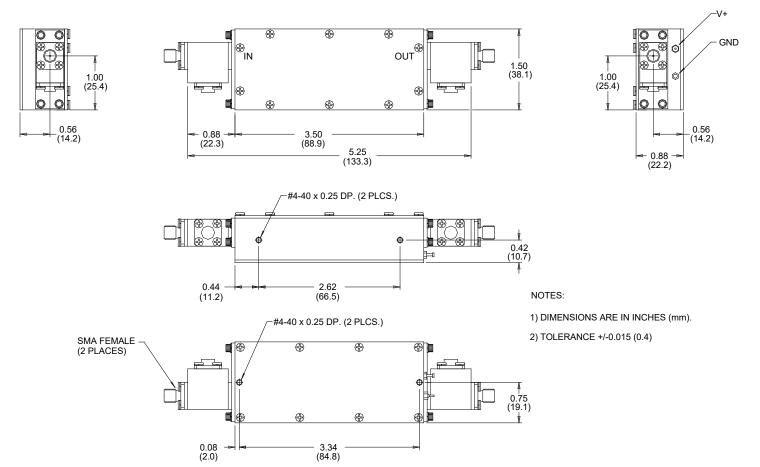
LD-5S Series Typical Applications

Typical Applications

Single-Thread Rx/Tx System: ANTENNA LINE DRIVER AMPLIFIER LOW NOISE AMPLIFIER (LNA) (LDA) INTERFACILITY LINK (IFL) TO CONVERTER **SOLID-STATE** POWER AMPLIFIER (SSPA) LDA IFL < FROM CONVERTER 1:1 Redundant System (Rx) 1:1 LNA SYSTEM 1:1 LDA SYSTEM LNA 1 LDA 1 ANTENNA IFL TO CONVERTER LDA 2 LNA 2 1:1 LNA CONTROLLER 1:1 LDA CONTROLLER



LD-5S Series Outline Drawing



Outline 6114



SMP Division Satcom Products

tel: +1 (669) 275-2744

email: satcommarketing@cpii.com web: www.cpii.com/satcom

For more detailed information, please refer to the corresponding CPI technical description if one has been published, or contact CPI. Specifications may change without notice as a result of additional data or product refinement. Please contact CPI before using this information for system design.

@ 2021 Communications & Power Industries LLC. Company proprietary: use and reproduction is strictly prohibited without written authorization from CPI.