

**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.

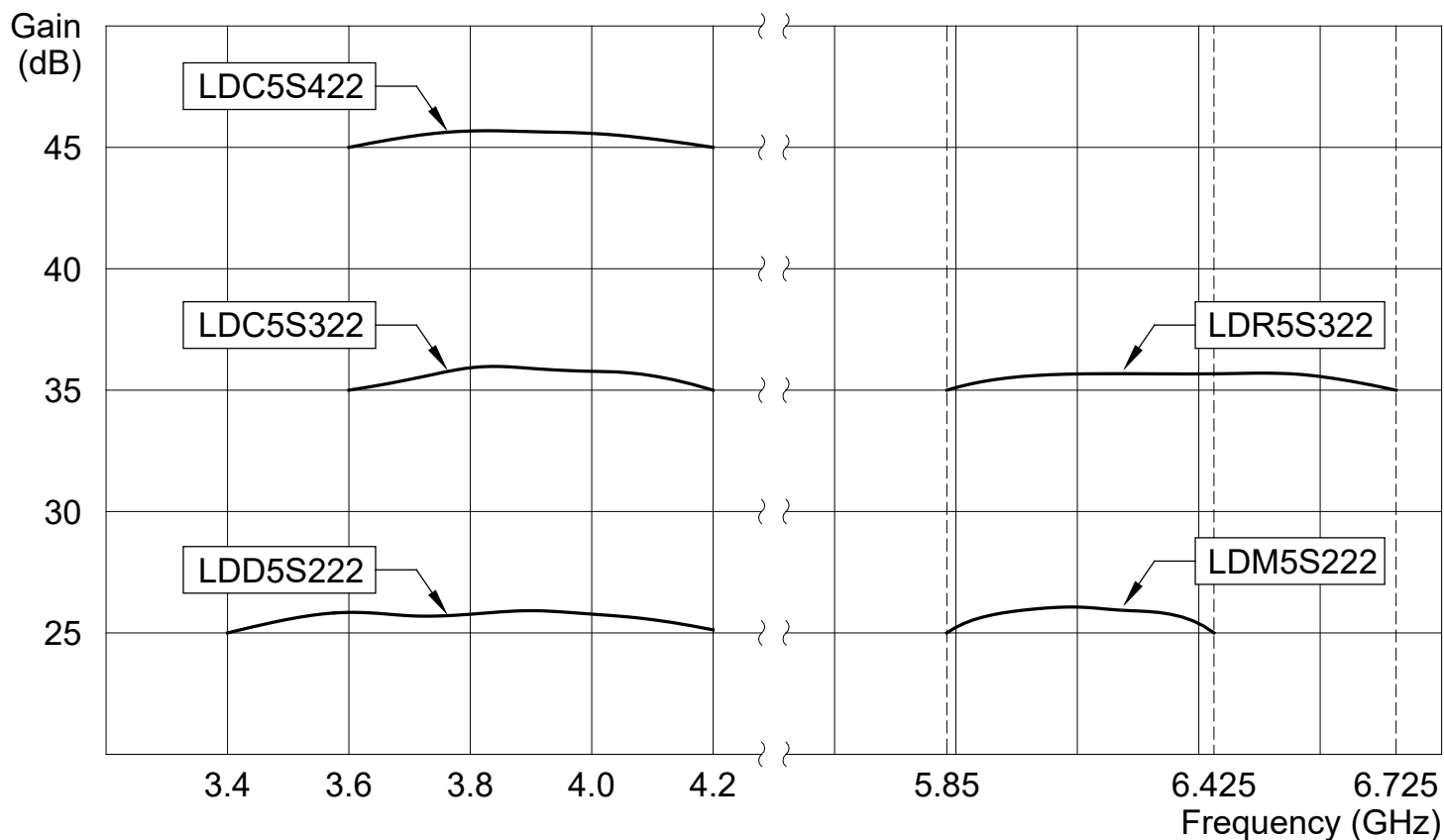
#### FEATURES:

- 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

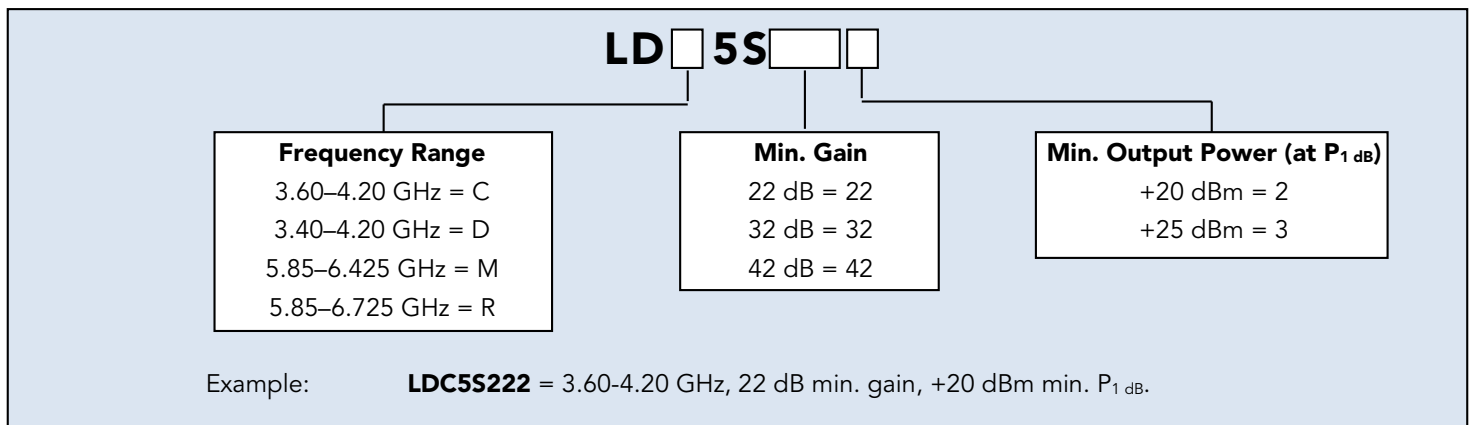
#### LD-5S Series Typical Gain vs. Frequency



## System Specifications

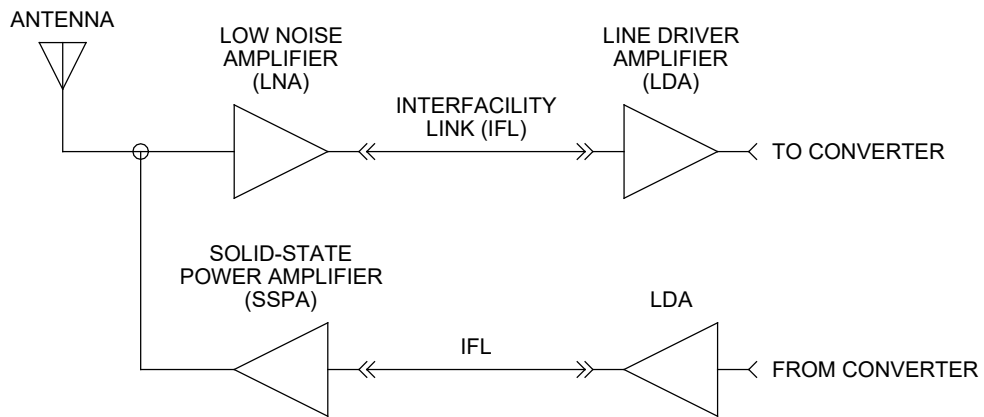
Parameter	Notes	Specification
<b>Frequency Range</b>	Band "C" Band "D" Band "M" Band "R"	3.60 to 4.20 GHz 3.40 to 4.20 GHz 5.85 to 6.425 GHz 5.85 to 6.725 GHz
<b>Gain</b>	"-5S22x" "-5S32x" "-5S42x"	22 dB min., 25 dB typical 32 dB min., 35 dB typical 42 dB min., 45 dB typical
<b>Gain Flatness</b>		±0.5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

## Part Number Ordering Information

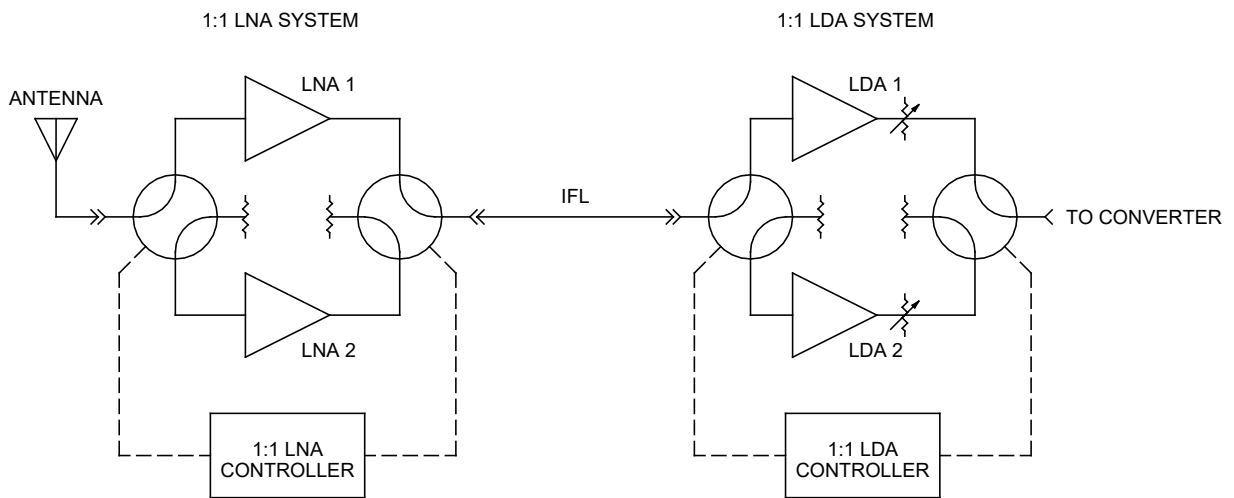


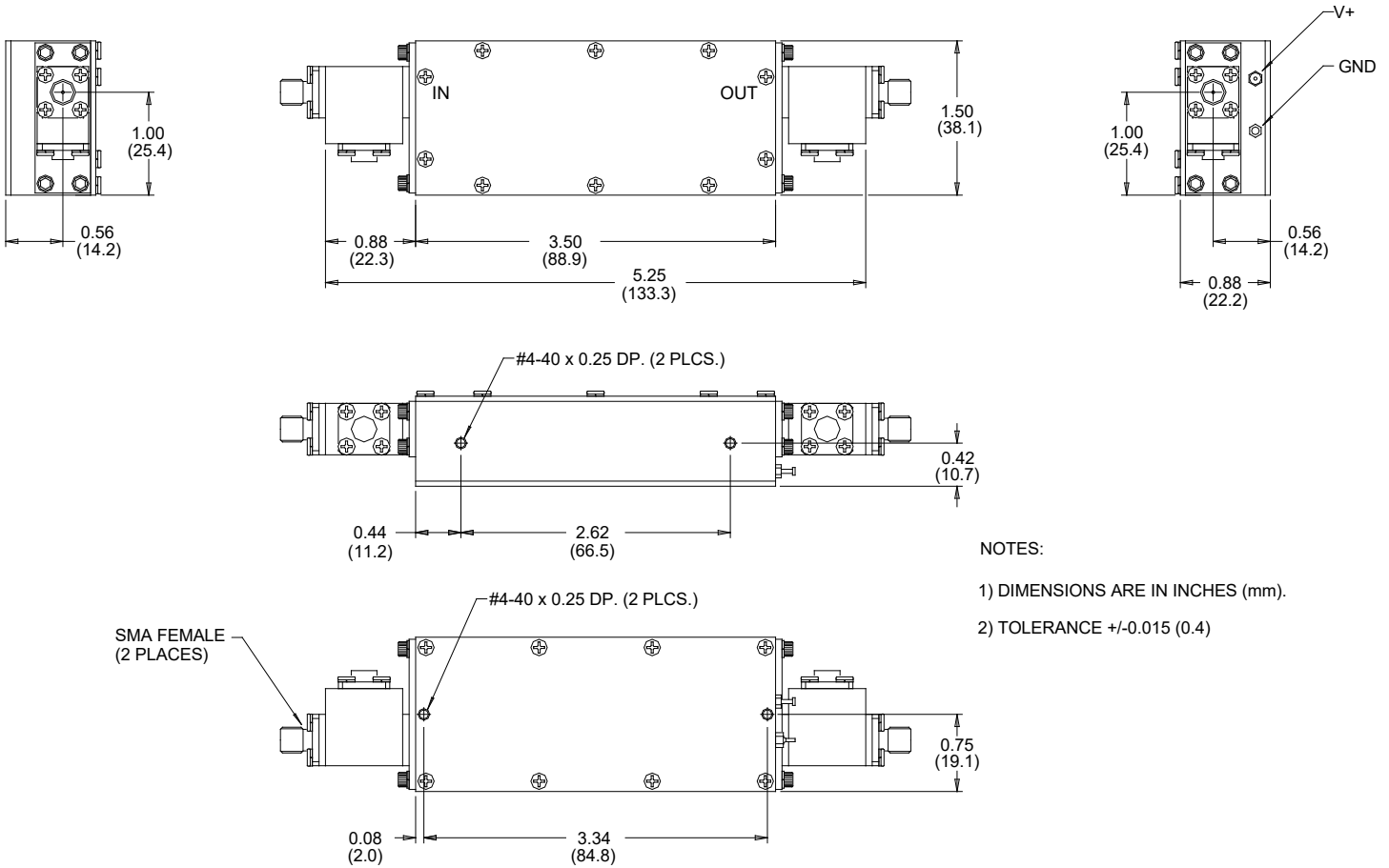
Typical Applications

Single-Thread Rx/Tx System:



1:1 Redundant System (Rx)





Outline 6114