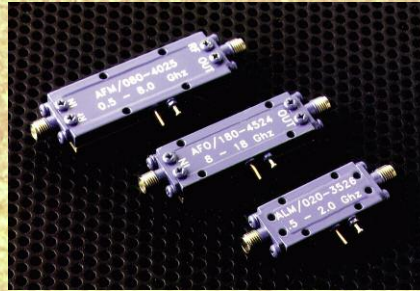


Low-Noise Amplifiers 0.1 GHz to 20.0 GHz

- ✓ **Low Cost**
- ✓ **Low-Noise**
- ✓ **Flatpak (AF Series), Small Size: 0.22 Inches Thick**
- ✓ **Aluminum Package with Removable Connectors**
- ✓ **Tig Welded Aluminum Housing**
- ✓ **Designed to Meet MIL-STD-883**
- ✓ **Custom Engineered Options (CEOs) (See page 14)**



Low-noise amplifiers (LNAs) are, by design and application, small signal amplifiers, intended to be the primary signal booster in R.F. subsystems; especially those where link-margins are critical.

Since overall LNA performance is determined largely by the first stage of amplification, CTT has combined its many years of experience in characterizing these devices with its expertise in the design of matching circuits to optimize noise figure performance.

CTT has developed an extensive "Library" of device parameters and compatible matching solutions, which allow predictable,

repeatable noise performance. This "Library" is the basis for CTT's automated module production capability, which has been able to virtually triple module production efficiency.

Description

These amplifiers are high performance, low cost GaAs FET amplifiers. They use the industrial standard "flatpak" which has from 0.66 to 0.86 inches in width and 0.22 inches in height. A 0.1" mounting plate can be added to reach 0.32" thick. Each comes with removable SMA connectors.

AF Series Model Number	Frequency Response (GHz)	Gain (dB)	Gain Flatness (±dB)	Noise Figure (dB)	P1dB (+dBm)	VSWR In/Out	Volts (DC)	DC Current (mA)	Case
	Min	Min	Max	Max	Min	Max	Typ	Typ	
AFX/010-1030	.1-1	30	1.50	1.0	10	2:1	12-15	180	FC2
AFX/040-1530	.1-4	30	1.50	1.5	10	2:1	12-15	180	FC2
AFM/020-1015	.5-2	15	0.75	1.0	8	2:1	12-15	80	FC2
AFM/020-1030	.5-2	30	1.00	1.0	10	2:1	12-15	120	FC2
AFM/020-1045	.5-2	45	1.50	1.0	10	2:1	12-15	200	FC2
AFM/020-1515	.5-2	15	0.75	1.5	8	2:1	12-15	80	FC2
AFM/020-1530	.5-2	30	1.00	1.5	10	2:1	12-15	120	FC2
AFM/020-5515	.5-2	15	1.00	5.5	20	2:1	12-15	150	FC2
AFM/020-3026	.5-2	26	1.00	3.0	20	2:1	12-15	220	FC2
AFM/020-3036	.5-2	36	1.50	3.0	20	2:1	12-15	260	FC2
AFM/020-3046	.5-2	46	1.50	3.0	20	2:1	12-15	320	FC2
AFM/040-2510	.5-4	10	0.75	2.5	8	2:1	12-15	70	FC2
AFM/040-2522	.5-4	22	1.00	2.5	12	2:1	12-15	100	FC2
AFM/040-2530	.5-4	30	1.25	2.5	15	2:1	12-15	160	FC2
AFM/040-2540	.5-4	40	1.25	2.5	15	2:1	12-15	200	FC2
AFM/040-5512	.5-4	12	1.00	5.5	20	2:1	12-15	150	FC2
AFM/040-3525	.5-4	25	1.25	3.5	20	2:1	12-15	200	FC2
AFM/040-3535	.5-4	35	1.25	3.5	20	2:1	12-15	250	FC2
AFO/040-1515	2-4	15	0.75	1.5	8	2:1	12-15	80	FS2
AFO/040-1530	2-4	30	1.00	1.5	15	2:1	12-15	120	FS2
AFO/040-5013	2-4	13	1.00	5.0	20	2:1	12-15	120	FS2
AFO/040-3027	2-4	27	1.00	3.0	20	2:1	12-15	200	FS2

New Products

Low-Noise Amplifiers, 0.1 GHz to 20 GHz