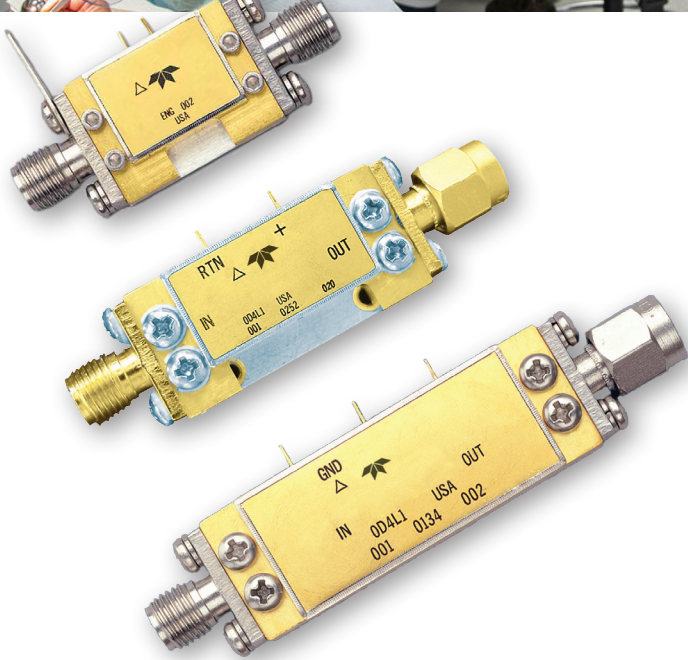


Teledyne Cougar Amplifier Product Overview

Flight-Tested and Space-Ready



Customizable
Tunable
Traceable
Proven

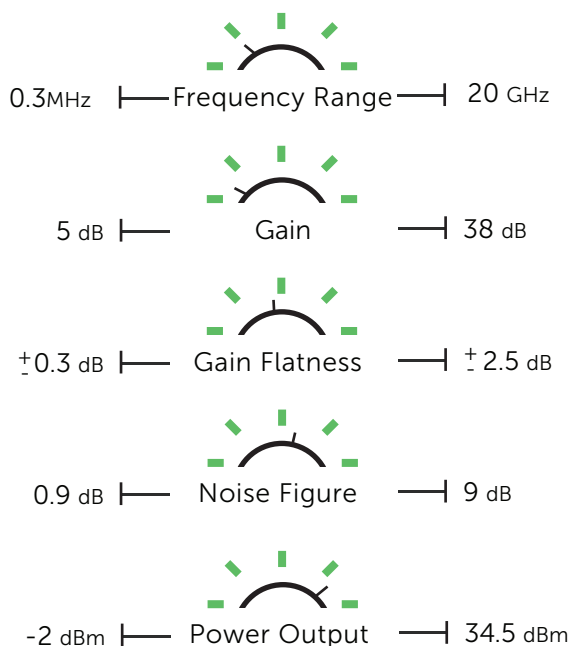
Amplifier Family Overview

Originating from the acquisition of Cougar Components Corporation, Teledyne RF & Microwave offers the broadest portfolio of amplifiers from 0.3 MHz to 20 GHz. More than 400 standard product offerings are ready for customization to optimize your next block diagram design. Every amplifier is built with chip and wire hybrid construction to maximize performance without sacrificing reliability.

Teledyne Cougar Amplifier Advantages

- Customizable for output power, gain, and flatness
- Tune gain vs bandwidth
- Tune bandwidth vs phase noise
- Proven chip & wire hybrid construction
- >400 standard catalog parts available
- Multiple package types available
- Traceable
- Proven space heritage

Configure Your Amplifier



Space-Qualified Amplifiers

Every amplifier in the product portfolio can be readily upscreened to MIL-PRF-38534 Class H and Class K for commercial, scientific, military, and government applications. With over 40 years of space heritage with no in-flight failures, you can trust Teledyne RF and Microwave to enable the success of your next space mission.



Amplifier Family Examples

Part Number	Frequency Low (GHz)	Frequency High (GHz)	Gain (dB, min)	Flatness (dB, +/-)	Noise Figure (dB, max)	Power Output (dBm, min)	Package Type
ARS169	0.001	0.15	26	0.8	3.8	21.5	SMTO-8B
ARJ109	0.0005	0.2	9.5	0.7	5.7	27	10 Pin Gullwing
AC347	0.005	0.25	12	0.7	3.2	14	TO-8
PSA-4132-38	0.1	0.4	19	1	6.5	16	SM-38
UTO-523	0.005	0.5	23	1	7	12	TO-8
AP719	0.01	0.7	26	0.7	4.7	23	TO-8
AC829	0.01	0.8	11	0.4	4.7	16.5	TO-8
AC1057	0.0003	1	8.5	0.9	7	13	TO-8
ARJ1049	0.02	1	9.5	1.5	5	29.5	10 Pin Gullwing
AC1286	0.65	1.2	27	0.7	1.7	9.5	TO-8
AC1532	1.2	1.6	11.5	0.5	4	11.5	TO-8
AR2098	0.03	2	9.5	0.7	6.5	28.5	TO-8B
AC2356	1.7	2.3	20.5	1	1.9	11	TO-8
A2CP2596	0.02	2.5	21	1	5.5	34	2-Stage CougarPak SMA
AR2589	0.1	2.5	18.5	0.8	5	27	TO-8B
AC3586	3	3.6	17.5	1	1	11	3-Stage CougarPak SMA
A2CP4122	0.8	4	35	1.2	3.5	19	2-Stage CougarPak SMA
A2CP2595	1	5	31	1.2	3.5	19	2-Stage CougarPak SMA
A3CP7029	3	7	25.5	1.2	4.8	26	TO-8
A3CP8049	2	8	20.5	1.2	5.5	27	3-Stage CougarPak SMA
AS8002	0.1	8	17.5	1.2	3.8	15	SMTO-8
A2CP11039	5	11	11	1	5	32	2-Stage CougarPak SMA
ACP12013	6	12	12	1	4.2	13	1-Stage CougarPak SMA
A2CP12024	6	12	22.5	1.7	4.2	12	2-Stage CougarPak SMA
ACP14012	6	14	9.5	1	4.5	12.5	1-Stage CougarPak SMA
A2CP14229	8	14	11.5	1	7	27.9	2-Stage CougarPak SMA
ACP14029	8	14	5	1	7	27.9	1 Stage CougarPak SMA
ACP16012	6	16	8	1	5.2	13	1-Stage CougarPak SMA
ACP16021	8	16	8	0.7	5.2	21.5	1-Stage CougarPak SMA
ACP16025	8	16	6	1	6	27.5	1-Stage CougarPak SMA
A2CP18212	8	18	15	1.5	7.3	14	2-Stage CougarPak SMA
ACP18021	10	18	7.5	1	6.2	21	1-Stage CougarPak SMA
A2CP18615	6	18	18	1.5	5.5	17.5	2-Stage CougarPak SMA
ACP20215	2	20	17	1.6	6.3	14	1-Stage CougarPak SMA

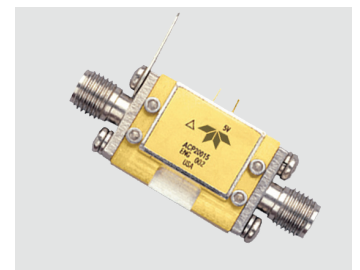
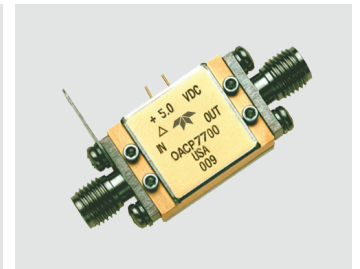
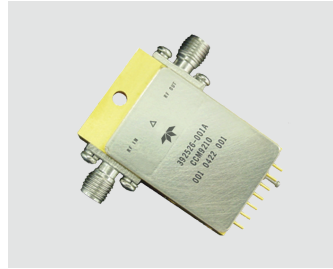
Notes:

- Gain, Flatness, Noise Figure and Power Outputs values are measured from -55 to +85 °C.
- Multiple package options available: CougarPak SMA, TO-8, TO-8B, SMTO-8B, 10-pin Gullwing and SM38.
- For a complete listing of all amplifiers, please visit www.teledynemicrowave.com or contact us at microwave@teledyne.com for assistance selecting the right amplifier for your design.

Other Components

In addition to amplifiers, Teledyne RF & Microwave offers a variety of other components to simplify your next design, including:

- Attenuators
- Bulk Acoustic Wave (BAW) delay devices,
- Circulators
- Detectors
- Frequency Doublers
- IQ Networks
- Isolators
- Linearizers
- Mixers
- Phase Shifters
- Power Dividers
- Switches
- Voltage Controlled Oscillators
- YIG Band Reject Filters
- YIG Filters
- YIG Oscillators



About Teledyne RF & Microwave

Teledyne RF & Microwave has more than 50 years of experience in the design, development, manufacture, and test of RF and microwave solutions to ensure the highest levels of reliability, from deep sea to space applications.

Contact Us

For more information on the complete Teledyne RF & Microwave Cougar portfolio, visit www.teledynemicrowave.com or contact us by e-mail at microwave@teledyne.com.