

Typical and guaranteed specifications vary versus frequency; see detailed data sheets for specification variations.

Full Performance Connectorized Amplifiers

Typical and Guaranteed Specifications—50 Ω System

| Model | Frequency Range MHz | Small Signal Gain dB | | | Gain Flatness ±dB | | Noise Figure dB | | | Power Output At 1dB Compression dBm | | | Rev. Iso. dB | Intercept Point dBm | SWR In/Out | | D.C. | |
|---|---------------------|----------------------|------------|--------------|-------------------|--------------|-----------------|------------|--------------|-------------------------------------|------------|--------------|--------------|---------------------|------------|--------------|------------|--------------|
| | | Typ. | Min. 0/50C | Min. -55/85C | Max. 0/50C | Max. -55/85C | Typ. | Max. 0/50C | Max. -55/85C | Typ. | Min. 0/50C | Min. -55/85C | | | Typ. | 3rd/2nd Typ. | Max. 0/50C | Max. -55/85C |
| Cascaded Amplifiers • Standard and Power Pack SMA Connectorized Packages | | | | | | | | | | | | | | | | | | |
| A2C5119 | 10-500 | 23.8 | 23.0 | 22.0 | 0.6 | 0.8 | 2.7 | 3.4 | 3.7 | 19.0 | 17.5 | 17.0 | 35 | 33/46 | 1.7 | 1.9 | 15 | 82 |
| A2C5120 | 10-800 | 26.5 | 25.0 | 23.5 | 0.7 | 0.9 | 3.2 | 4.0 | 4.5 | 19.0 | 18.0 | 17.5 | 34 | 34/43 | 1.9 | 2.0 | 15 | 102 |
| A2C5127 | 10-500 | 26.5 | 25.0 | 24.0 | 0.7 | 0.9 | 3.5 | 4.0 | 4.5 | 27.0 | 25.0 | 24.5 | 36 | 39/47 | 1.9 | 2.0 | 15 | 220 |
| A4P5130 | 10-500 | 37.5 | 36.0 | 35.0 | 0.7 | 0.9 | 2.7 | 3.2 | 3.7 | 30.0 | 29.0 | 28.0 | 55 | 42/54 | 2.2 | 2.4 | 15 | 522 |
| A2P1220 | 30-1200 | 31.5 | 29.0 | 27.5 | 0.7 | 1.0 | 4.3 | 5.5 | 6.0 | 29.7 | 29.0 | (28.5) | 53 | 40/54 | 1.8 | 2.0 | 15 | 500 |
| A2C1221 | 10-1000 | 40.5 | 39.0 | 37.0 | 0.9 | 1.0 | 2.6 | 3.5 | 4.0 | 21.5 | 19.5 | 19.0 | 55 | 33/42 | 1.8 | 2.0 | 15 | 143 |
| A4C1222 | 10-1000 | 46.0 | 44.0 | 42.0 | 0.9 | 1.2 | 3.6 | 4.5 | 5.0 | 22.0 | 20.0 | 19.5 | 65 | 34/44 | 1.8 | 2.0 | 15 | 206 |
| A2C1611 | 1200-1700 | 38.0 | 37.0 | 36.0 | 0.6 | 0.7 | 1.0 | 1.3 | 1.8 | 17.5 | 16.8 | 16.0 | 58 | 27/30 | 1.9 | 2.0 | 8 | 122 |
| A2P2010 | 30-2000 | 19.3 | 17.5 | 16.5 | 0.7 | 0.8 | 4.8 | 7.0 | 7.5 | 29.5 | 29.0 | (28.5) | 37 | 42/54 | 1.9 | 2.0 | 15 | 555 |
| A2P2020 | 50-2000 | 27.5 | 25.5 | 24.5 | 0.7 | 0.8 | 5.4 | 7.0 | 7.5 | 29.5 | 29.0 | (28.5) | 52 | 42/55 | 1.9 | 2.0 | 15 | 653 |
| A2C2115 | 10-2000 | 27.5 | 25.5 | 24.5 | 0.8 | 1.0 | 3.0 | 3.5 | 4.0 | 15.0 | 14.0 | 14.0 | 49 | 27/43 | 1.9 | 2.0 | 15 | 115 |
| A4C2123 | 10-2000 | 41.0 | 38.0 | 36.0 | 0.9 | 1.2 | 3.1 | 3.7 | 4.2 | 24.5 | 22.5 | 22.0 | 53 | 33/50 | 1.9 | 2.0 | 15 | 233 |
| A4C2124 | 10-2000 | 32.4 | 30.0 | 28.0 | 1.5 | 1.6 | 2.9 | 3.5 | 4.0 | 24.5 | 22.5 | 22.0 | 50 | 36/51 | 1.9 | 2.0 | 15 | 230 |
| A2P2127 | 10-2000 | 21.0 | 20.0 | 18.5 | 0.9 | 1.0 | 3.3 | 3.8 | 4.3 | 27.0 | 25.5 | 25.0 | 37 | 39/50 | 2.4 | 2.5 | 15 | 315 |
| A2P2128 | 50-2000 | 27.0 | 25.0 | 23.5 | 0.7 | 1.0 | 3.2 | 3.7 | 4.2 | 27.5 | 26.3 | 25.8 | 49 | 39/55 | 1.9 | 2.0 | 15 | 333 |
| A2P2130 | 30-2000 | 21.0 | 19.0 | 17.5 | 0.9 | 1.2 | 3.5 | 4.0 | 4.5 | 30.0 | 29.0 | (28.5) | 40 | 41/55 | 1.9 | 2.0 | 15 | 495 |
| A2P2510 | 200-2500 | 19.0 | 17.0 | 15.5 | 0.8 | 0.9 | 4.7 | 5.5 | 6.0 | 27.0 | 26.0 | (25.5) | 35 | 37/51 | 1.9 | 2.0 | 15 | 318 |
| A2P2520 | 100-2500 | 35.0 | 33.0 | 32.0 | 1.0 | 1.2 | 3.6 | 4.5 | 5.0 | 27.5 | 26.5 | (26.0) | 63 | 38/53 | 1.9 | 2.0 | 15 | 363 |
| A2C3110 | 10-3000 | 19.0 | 17.5 | 17.0 | 1.0 | 1.2 | 3.0 | 4.0 | 4.5 | 22.0 | 20.5 | 20.0 | 33 | 33/43 | 1.9 | 2.0 | 15 | 172 |
| A4C3120 | 10-3000 | 30.0 | 28.0 | 27.0 | 1.0 | 1.2 | 3.4 | 4.5 | 5.0 | 21.0 | 20.0 | 19.5 | 50 | 35/65 | 1.9 | 2.0 | 15 | 240 |
| A4C3125 | 10-3000 | 33.0 | 31.0 | 29.0 | 0.8 | 1.0 | 3.0 | 3.7 | 4.2 | 25.5 | 24.5 | 24.0 | 52 | 39/51 | 1.9 | 2.0 | 15 | 317 |
| A4P3129 | 500-3000 | 28.3 | 27.0 | 25.0 | 0.8 | 1.0 | 4.0 | 5.0 | 5.5 | 29.0 | 28.3 | (27.8) | 50 | 37/42 | 1.9 | 2.0 | 15 | 575 |
| A2P3527 | 100-3500 | 28.0 | 27.0 | 25.0 | 0.8 | 1.0 | 4.0 | 5.0 | 5.5 | 27.0 | 26.0 | 25.5 | 50 | 36/44 | 1.9 | 2.0 | 15 | 370 |
| A2P4022 | 800-4000 | 33.0 | 30.0 | 29.0 | 1.0 | 1.2 | 4.0 | 5.0 | 5.5 | 21.8 | 20.5 | 20.0 | 60 | 34/53 | 1.9 | 2.0 | 15 | 285 |
| A2C4110 | 100-4000 | 16.6 | 15.0 | 14.0 | 1.0 | 1.2 | 5.2 | 6.0 | 6.5 | 21.5 | 20.5 | 20.0 | 33 | 34/54 | 1.9 | 2.0 | 15 | 230 |

| Model | Frequency Range GHz | Small Signal Gain dB | | | Gain Flatness ±dB | | Noise Figure dB | | | Power Output At 1dB Compression dBm | | | Rev. Iso. dB | Intercept Point dBm | SWR In/Out | | D.C. | |
|---|---------------------|----------------------|------------|--------------|-------------------|--------------|-----------------|------------|--------------|-------------------------------------|------------|--------------|--------------|---------------------|------------|--------------|------------|--------------|
| | | Typ. | Min. 0/50C | Min. -55/85C | Max. 0/50C | Max. -55/85C | Typ. | Max. 0/50C | Max. -55/85C | Typ. | Min. 0/50C | Min. -55/85C | | | Typ. | 3rd/2nd Typ. | Max. 0/50C | Max. -55/85C |
| Single-stage, Two-stage and Three-stage SMA Connectorized Packages | | | | | | | | | | | | | | | | | | |
| A2CP4121 | 0.3-4.0 | 29.0 | 27.0 | 25.5 | 0.8 | 1.2 | 2.2 | 3.0 | 3.5 | 21.5 | 20.0 | 19.0 | 55 | 31/40 | 1.9 | 2.0 | 15 | 205 |
| A2CP4122 | 0.8-4.0 | 37.5 | 36.5 | 35.0 | 1.0 | 1.2 | 2.3 | 3.0 | 3.5 | 21.5 | 20.0 | 19.0 | 60 | 33/47 | 1.9 | 2.0 | 15 | 207 |
| A2CP5008 | 2.0-5.0 | 12.0 | 10.5 | 10.0 | 1.0 | 1.2 | 3.0 | 3.7 | 4.2 | 24.5 | 23.5 | 23.0 | 24 | 35/50 | 1.7 | 1.7 | 12 | 250 |
| A2CP5009 | 2.0-5.0 | 8.5 | 7.5 | 7.0 | 1.0 | 1.2 | 5.5 | 6.0 | 6.5 | 29.5 | 28.5 | 28.0 | 22 | 42/60 | 2.0 | 2.0 | 15 | 370 |
| A2CP5021 | 1.0-5.0 | 34.0 | 32.0 | 31.0 | 0.8 | 1.2 | 2.3 | 3.0 | 3.5 | 21.5 | 20.0 | 19.0 | 79 | 34/49 | 1.9 | 2.0 | 15 | 250 |
| A2CP5121 | 0.3-5.0 | 28.5 | 26.0 | 24.0 | 1.0 | 1.2 | 2.2 | 3.0 | 3.5 | 20.5 | 19.5 | 18.0 | 54 | 30/40 | 1.9 | 2.0 | 15 | 205 |
| A2CP6008 | 2.0-6.0 | 11.0 | 10.0 | 9.5 | 1.5 | 1.8 | 3.0 | 3.7 | 4.2 | 24.0 | 23.0 | 22.5 | 23 | 34/50 | 1.7 | 1.7 | 12 | 250 |
| A3CP6025 | 0.01-6.0 | 24.0 | 23.0 | 22.5 | 1.5 | 2.5 | 4.5 | 5.5 | 6.0 | 25.0 | 24.0 | 23.5 | 50 | 34/54 | 2.0 | 2.3 | 15 | 300 |
| A2CP6115 | 0.5-6.0 | 27.0 | 25.0 | 23.5 | 0.8 | 1.2 | 4.5 | 5.5 | 6.0 | 15.5 | 14.0 | 13.5 | 71 | 27/45 | 1.9 | 2.0 | 15 | 210 |
| A2CP6120 | 1.0-6.0 | 29.0 | 27.0 | 25.0 | 0.8 | 1.2 | 4.5 | 5.5 | 6.0 | 21.0 | 19.0 | 18.5 | 70 | 31/54 | 1.9 | 2.0 | 15 | 240 |
| ACP7019 | 3.0-7.0 | 14.0 | 13.2 | 12.7 | 0.6 | 0.8 | 3.1 | 3.8 | 5.2 | 27.5 | 26.5 | 26.0 | 24 | 35/55 | 1.9 | 2.0 | 12 | 250 |
| A3CP7029 | 3.0-7.0 | 27.5 | 26.0 | 25.0 | 1.0 | 1.2 | 3.6 | 4.3 | 4.8 | 27.5 | 26.5 | 26.0 | 48 | 33.5/51 | 1.9 | 2.0 | 12 | 425 |

Underlined models indicate the latest published data sheets available on our website. Shaded models indicate typical output power ≥+20 dBm. () Indicates minimum temperature at -55/+71°C.



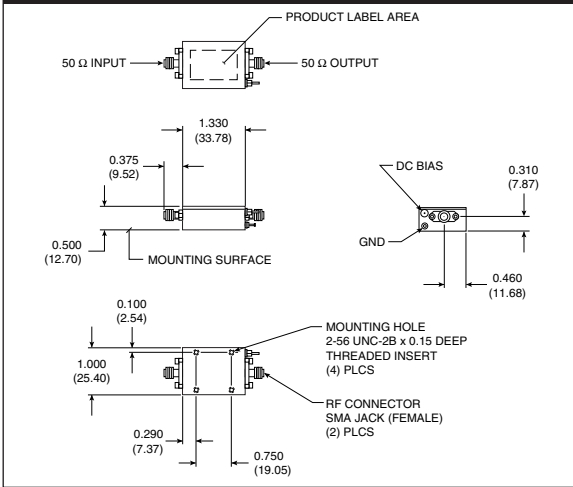
Full Performance Connectorized Amplifiers
Typical and Guaranteed Specifications—50 Ω System

AMPLIFIERS, Connectorized - to 20 GHz

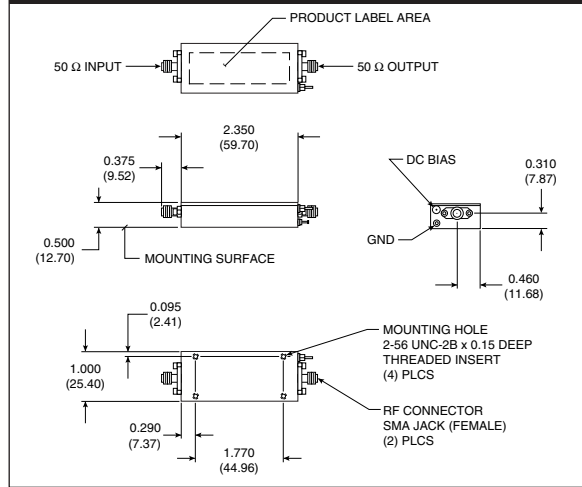
Table with columns: Model, Frequency Range GHz, Small Signal Gain dB, Gain Flatness dB, Noise Figure dB, Power Output At 1dB Compression dBm, Rev. Iso. dB, Intercept Point dBm, SWR In/Out, D.C. (Volts, mA). Includes a section for Single-stage, Two-stage and Three-stage SMA Connectorized Packages.

Underlined models indicate the latest published data sheets available on our website. Shaded models indicate typical output power ≥+20 dBm.

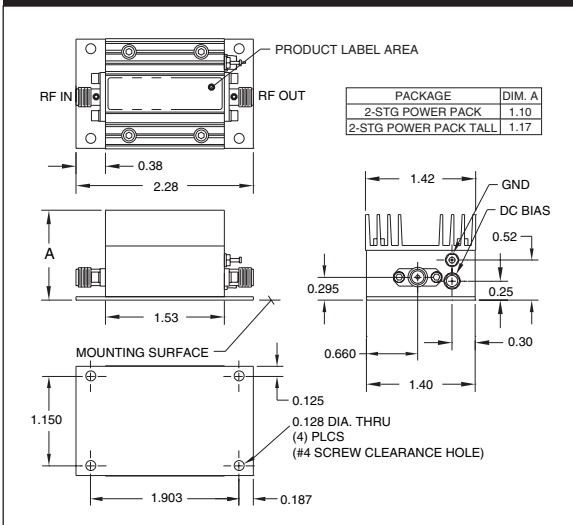
**TO-8 Amplifier, SMA Case
(two-stage)**



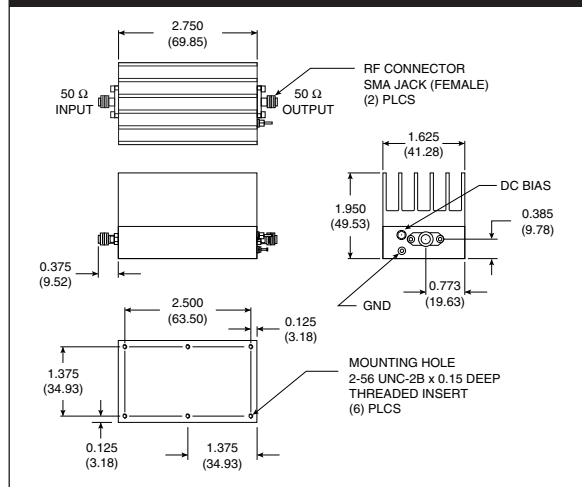
**TO-8 Amplifier, SMA Case
(three- and four-stage)**



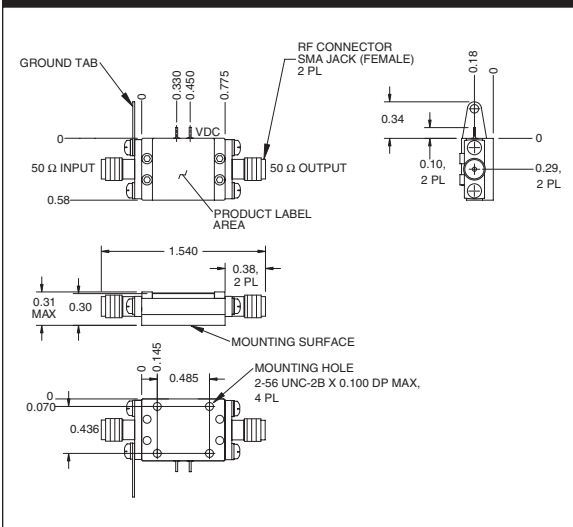
Power Pack, SMA Case (two-stage)



**Power Pack, SMA Case
(three- and four-stage)**



CougarPak™ (single-stage)



**High Frequency CougarPak™ ≥12.0 GHz
(single-stage)**

