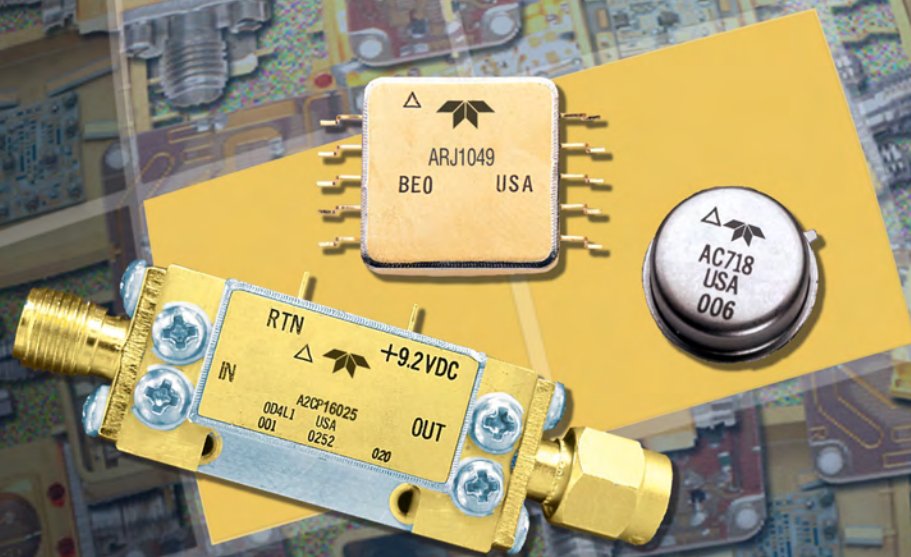


Amplifiers

Catalog Products (EAR99/Non-ITAR)

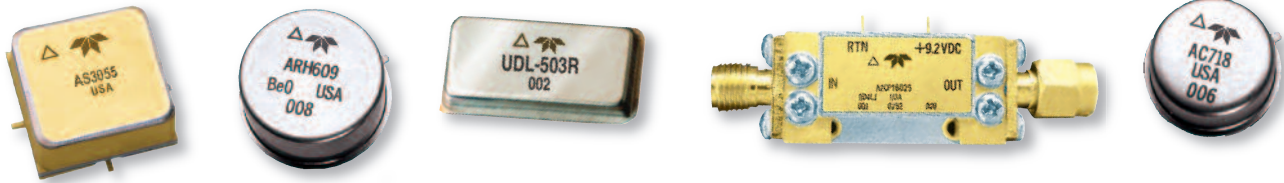


Teledyne Microwave Solutions (TMS) offers a variety of high power cascadable amplifiers operating over a 1MHz to 20GHz range. Operating over many octaves, with many customized power and noise ranges, TMS has amplifier products to meet your demanding needs. Applications include: aerospace, space, military, industrial and commercial.



TELEDYNE MICROWAVE SOLUTIONS
Everywhereyoulook™

High Performance 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 |
| Listed by model number | | | | | | | | | | | | | | | | | | |
| UTO-103 | 10-100 | 27.0 | 25.5 | 24.5 | 1.0 | 1.0 | 1.6 | 2.1 | 2.4 | 11.0 | 9.5 | 9.0 | 31 | 22/33 | 2.0 | 2.0 | 5 | 15 |
| A2CP104 | 1-100 | 8.4 | 7.8 | 7.3 | 0.3 | 0.7 | 1.5 | 1.9 | 2.4 | 22.5 | 21.0 | 21.0 | 11 | 40/55 | 1.5 | 1.6 | 15 | 43 |
| AC105 | 1-150 | 15.0 | 14.0 | 13.5 | 0.5 | 0.7 | 2.5 | 3.0 | 3.5 | 15.0 | 14.5 | 14.0 | 27 | 30/42 | 1.9 | 2.0 | 5 | 35 |
| ACH107 | 10-200 | 18.0 | 17.0 | 16.5 | 0.4 | 0.7 | 2.2 | 2.7 | 3.2 | 16.0 | 15.5 | 15.0 | 36 | 31/38 | 1.8/1.5 | 2.0/1.7 | 15 | 33 |
| AP108 | 1-150 | 15.0 | 14.5 | 14.0 | 0.4 | 0.5 | 3.3 | 4.0 | 4.5 | 25.0 | 24.0 | 23.5 | 28 | 43/60 | 1.9 | 2.0 | 15 | 109 |
| ARJ109 | 0.5-200 | 10.8 | 10.0 | 9.5 | 0.5 | 0.7 | 4.5 | 5.2 | 5.7 | 28.5 | 27.5 | 27.0 | 17 | 44/75 | 1.8 | 1.9 | 15 | 235 |
| UTO-111 | 10-100 | 11.5 | 10.5 | 10.0 | 0.3 | 0.5 | 1.4 | 1.7 | 2.0 | 16.8 | 15.5 | 15.5 | 15 | 33/47 | 2.0 | 2.0 | 15 | 14 |
| AP148 | 1-200 | 11.0 | 10.5 | 10.0 | 0.4 | 0.6 | 3.5 | 4.2 | 4.7 | 25.0 | 24.5 | 24.0 | 19 | 43/59 | 1.7 | 1.8 | 15 | 109 |
| AC155 | 5-150 | 14.8 | 14.0 | 13.5 | 0.6 | 0.8 | 2.2 | 2.6 | 3.0 | 15.5 | 14.5 | 14.0 | 27 | 30/41 | 1.8/1.7 | 2.0/1.9 | 5 | 34 |
| ARS169 | 1-150 | 28.3 | 27.0 | 26.0 | 0.5 | 0.8 | 2.3 | 3.2 | 3.8 | 23.0 | 22.0 | 21.5 | 65 | 40/62 | 1.7 | 2.0 | 15 | 147 |
| ARH209 | 10-250 | 10.8 | 10.0 | 9.5 | 0.8 | 1.0 | 5.0 | 5.7 | 6.3 | 28.0 | 27.0 | 26.5 | 17 | 44/70 | 1.8 | 1.9 | 15 | 235 |
| UTO-210 | 10-200 | 9.0 | 8.0 | 7.5 | 1.0 | 1.0 | 1.5 | 2.0 | 2.5 | 13.0 | 11.0 | 11.0 | 11 | 29/40 | 2.0 | 2.0 | 15 | 15 |
| UTO-211 | 10-200 | 8.5 | 7.5 | 7.5 | 1.0 | 1.0 | 2.0 | 2.7 | 3.0 | 20.0 | 17.0 | 16.0 | 11 | 31/45 | 2.0 | 2.0 | 15 | 30 |
| UTO-221 | 10-200 | 28.5 | 27.0 | 26.0 | 0.7 | 1.0 | 2.0 | 2.5 | 3.0 | 15.5 | 13.5 | 13.0 | 33 | 23/28 | 2.0 | 2.0 | 15 | 29 |
| UTO-222 | 20-200 | 29.5 | 28.0 | 27.0 | 0.7 | 1.0 | 2.9 | 3.6 | 4.5 | 21.0 | 18.0 | 17.0 | 35 | 28/34 | 2.0 | 2.0 | 15 | 47 |
| AC238 | 5-200 | 32.0 | 31.0 | 30.0 | 0.4 | 0.7 | 2.6 | 3.0 | 3.5 | 15.5 | 14.5 | 14.0 | 38 | 30/48.5 | 1.3 | 1.4 | 5 | 64 |
| AC251 | 10-200 | 8.0 | 7.5 | 7.0 | 0.3 | 0.4 | 1.2 | 1.7 | 2.2 | 13.2 | 12.0 | 11.5 | 11 | 30/49 | 1.5 | 1.7 | 5 | 11 |
| AC262 | 30-250 | 8.0 | 7.5 | 6.8 | 0.5 | 0.7 | 1.3 | 1.8 | 2.3 | 19.3 | 17.0 | 16.5 | 11 | 35/54 | 1.9 | 2.0 | 15 | 23 |
| AC263 | 30-200 | 8.3 | 7.5 | 6.8 | 0.5 | 0.7 | 1.5 | 2.0 | 2.5 | 22.5 | 21.5 | 20.5 | 11 | 37/53 | 2.0 | 2.0 | 15 | 37 |
| AC264 | 30-250 | 8.3 | 7.5 | 6.8 | 0.5 | 0.7 | 2.0 | 2.3 | 2.7 | 22.5 | 21.8 | 21.3 | 11 | 43/55 | 2.0 | 2.0 | 15 | 45 |
| AC271 | 10-250 | 8.0 | 7.5 | 7.0 | 0.5 | 0.7 | 1.5 | 1.9 | 2.3 | 14.0 | 13.0 | 12.5 | 11 | 30/49 | 1.8 | 2.0 | 15 | 14.5 |
| AC272 | 10-250 | 8.0 | 7.5 | 7.0 | 0.5 | 0.7 | 2.0 | 2.5 | 3.0 | 18.5 | 17.5 | 17.0 | 11 | 32/46 | 2.0 | 2.1 | 15 | 23 |
| AC273 | 30-250 | 8.0 | 7.5 | 7.0 | 0.5 | 0.7 | 2.4 | 3.0 | 3.5 | 20.5 | 20.0 | 19.5 | 11 | 36/50 | 2.0 | 2.0 | 15 | 37 |
| AC281 | 10-250 | 28.5 | 27.5 | 27.0 | 0.5 | 0.7 | 2.3 | 2.6 | 3.0 | 16.2 | 15.5 | 14.5 | 34 | 29/33 | 1.8/2.0 | 2.0/2.1 | 15 | 27 |
| AC282 | 10-250 | 29.0 | 28.5 | 28.0 | 0.5 | 0.7 | 3.0 | 3.4 | 3.8 | 21.0 | 20.0 | 19.5 | 35 | 33/40 | 1.8/2.0 | 2.0/2.1 | 15 | 47 |
| AC293 | 10-200 | 28.8 | 28.3 | 27.8 | 0.4 | 0.5 | 2.0 | 2.5 | 3.0 | 17.5 | 17.0 | 16.5 | 34 | 28/35 | 1.8 | 1.9 | 15 | 33 |
| AP294 | 10-200 | 29.3 | 28.5 | 28.0 | 0.4 | 0.5 | 3.5 | 4.0 | 4.5 | 22.5 | 21.5 | 21.0 | 36 | 32/44 | 1.7/1.9 | 1.8/2.0 | 15 | 60 |
| AC305 | 10-250 | 11.8 | 11.0 | 10.5 | 0.4 | 0.6 | 2.1 | 2.6 | 3.1 | 15.5 | 15.0 | 14.5 | 18 | 31/46 | 1.8/1.5 | 2.0/1.6 | 5 | 36 |
| AP308 | 10-250 | 13.0 | 12.5 | 12.0 | 0.5 | 0.7 | 3.7 | 4.0 | 4.5 | 23.0 | 22.0 | 21.5 | 17 | 35/48 | 1.9/1.7 | 2.0/1.8 | 8 | 93 |
| AC345 | 5-250 | 13.0 | 12.5 | 12.0 | 0.5 | 0.7 | 2.0 | 2.5 | 3.0 | 12.0 | 11.0 | 10.5 | 17 | 25/33 | 1.6/1.3 | 1.7/1.5 | 15 | 30 |
| AC347 | 5-250 | 13.0 | 12.5 | 12.0 | 0.5 | 0.7 | 2.3 | 2.7 | 3.2 | 15.5 | 14.5 | 14.0 | 17 | 28/41 | 1.6/1.3 | 1.7/1.5 | 15 | 46 |
| AP348 | 10-250 | 13.5 | 12.5 | 12.0 | 0.4 | 0.6 | 3.2 | 4.0 | 4.5 | 25.0 | 24.0 | 23.5 | 17 | 42/57 | 1.7 | 1.8 | 15 | 108 |
| ARH356 [^] | 10-300 | 15.5 | 15.0 | 14.5 | 0.3 | 0.4 | 2.5 | 3.0 | 3.5 | 15.0 | 14.5 | 14.0 | 23 | 32/40 | 1.9 | 2.0 | 5 | 30 |
| AC378 | 5-300 | 14.0 | 13.2 | 13.0 | 0.5 | 0.7 | 5.0 | 6.0 | 6.5 | 19.5 | 18.0 | 17.5 | 18 | 34/49 | 1.7 | 1.8 | 15 | 65 |
| AC379 | 5-300 | 14.0 | 13.2 | 13.0 | 0.5 | 0.7 | 5.0 | 6.0 | 6.5 | 22.5 | 21.5 | 20.5 | 18 | 39/51 | 1.7 | 1.8 | 15 | 88 |
| AC380 | 10-250 | 25.0 | 24.0 | 23.7 | 0.5 | 0.7 | 1.7 | 2.3 | 2.8 | 9.0 | 7.5 | 7.0 | 30 | 22/31 | 2.0 | 2.0 | 15 | 17 |
| AC381 | 10-250 | 24.0 | 23.0 | 22.7 | 0.5 | 0.7 | 2.7 | 3.3 | 3.8 | 16.0 | 15.0 | 14.5 | 29 | 29/38 | 2.0/1.7 | 2.0/1.8 | 15 | 27 |
| AC382 | 10-250 | 24.0 | 23.0 | 22.7 | 0.5 | 0.7 | 3.3 | 4.0 | 4.5 | 21.0 | 20.0 | 19.0 | 29 | 34/43 | 2.0/1.7 | 2.0/1.8 | 15 | 47 |
| AC383 | 10-250 | 35.0 | 34.0 | 33.0 | 0.7 | 1.0 | 1.7 | 2.5 | 3.0 | 0.5 | -1.0 | -2.0 | 47 | 11/19 | 1.7 | 1.9 | 5 | 14 |
| AC386 | 10-250 | 28.0 | 27.0 | 26.5 | 0.7 | 0.8 | 2.6 | 3.3 | 3.8 | 8.0 | 7.5 | 7.0 | 40 | 20/33 | 1.7 | 1.8 | 5 | 21 |
| AP388 | 10-250 | 14.0 | 13.0 | 12.5 | 0.5 | 0.7 | 5.0 | 5.5 | 6.0 | 23.0 | 22.0 | 21.5 | 20 | 37/45 | 1.9 | 2.0 | 15 | 65 |
| AP389 | 10-250 | 24.5 | 23.0 | 22.5 | 0.7 | 0.8 | 3.3 | 4.3 | 4.8 | 23.0 | 22.0 | 21.5 | 29 | 36/46 | 1.8 | 1.8 | 15 | 65 |
| AC391 | 10-250 | 24.0 | 23.0 | 22.7 | 0.5 | 0.7 | 3.0 | 3.5 | 4.0 | 19.0 | 18.0 | 17.5 | 29 | 31/40 | 2.0/1.7 | 2.0/1.8 | 15 | 37 |

Current data sheets available on website. Shaded models indicate typical output power ≥+20 dBm.

High Performance 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 |
| Listed by model number | | | | | | | | | | | | | | | | | | |
| AC437 | 10-400 | 12.7 | 12.0 | 11.5 | 0.5 | 0.7 | 4.7 | 5.3 | 6.0 | 16.5 | 15.5 | 15.0 | 19 | 32/44 | 1.7/2.0 | 1.9/2.0 | 15 | 33 |
| UTO-440 | 10-400 | 13.0 | 12.5 | 12.0 | 0.7 | 0.7 | 3.6 | 4.5 | 5.0 | 9.0 | 8.0 | 7.5 | 19 | 23/26 | 2.0 | 2.0 | 15 | 15 |
| UTO-441 | 20-400 | 14.4 | 13.5 | 13.0 | 0.7 | 0.7 | 3.7 | 4.5 | 5.0 | 16.0 | 15.0 | 15.0 | 21 | 32/44 | 2.0 | 2.0 | 15 | 32 |
| UTO-442 | 20-400 | 14.0 | 13.0 | 12.5 | 0.7 | 0.7 | 4.7 | 5.5 | 6.0 | 21.5 | 20.0 | 19.0 | 19 | 33/47 | 2.0 | 2.0 | 15 | 62 |
| UTO-443 | 10-400 | 13.2 | 12.5 | 12.0 | 0.7 | 0.7 | 3.6 | 4.5 | 5.0 | 5.5 | 4.5 | 4.0 | 20 | 19/25 | 2.0 | 2.0 | 5 | 10 |
| UTO-444 | 10-400 | 13.0 | 12.5 | 12.0 | 0.7 | 0.7 | 4.0 | 5.0 | 5.5 | 8.7 | 8.0 | 7.5 | 20 | 22/35 | 2.0 | 2.0 | 5 | 15 |
| AP448 | 10-400 | 10.5 | 10.0 | 9.5 | 0.5 | 0.6 | 4.3 | 4.8 | 5.3 | 24.8 | 24.0 | 23.5 | 17 | 42/53 | 1.7/1.5 | 1.8/1.6 | 15 | 110 |
| AC453 | 10-400 | 14.8 | 13.5 | 13.0 | 0.5 | 0.7 | 2.8 | 4.0 | 4.5 | 5.5 | 4.5 | 4.0 | 18 | 17/24 | 1.8/2.0 | 1.9/2.0 | 5 | 10.5 |
| AC457 | 10-400 | 15.3 | 14.5 | 14.0 | 0.7 | 0.9 | 3.0 | 3.5 | 4.0 | 10.5 | 9.0 | 8.5 | 21 | 25/37 | 1.8/2.0 | 1.9/2.0 | 5 | 15.5 |
| AC487 | 10-400 | 15.5 | 14.5 | 14.0 | 0.7 | 0.9 | 3.6 | 4.0 | 4.5 | 17.0 | 15.5 | 15.0 | 21 | 32/44 | 1.7/2.0 | 1.9/2.0 | 15 | 33 |
| AC501 | 5-500 | 16.2 | 15.0 | 14.3 | 0.5 | 0.7 | 2.1 | 3.0 | 3.5 | -1.5 | -2.0 | -3.5 | 20 | 11/10 | 1.8 | 2.0 | 15 | 10 |
| UTO-502 | 5-500 | 14.5 | 14.0 | 13.5 | 1.0 | 1.0 | 3.5 | 4.0 | 4.5 | 8.0 | 7.0 | 7.0 | 21 | 21/30 | 2.0 | 2.0 | 15 | 23 |
| UTO-503 | 5-500 | 10.0 | 9.0 | 8.5 | 1.0 | 1.0 | 4.5 | 5.0 | 6.0 | 15.0 | 13.0 | 13.0 | 17 | 29/42 | 2.0 | 2.0 | 24 | 50 |
| AC505 | 0.3-500 | 15.0 | 14.0 | 13.5 | 0.5 | 0.7 | 3.3 | 4.0 | 4.5 | 10.0 | 8.0 | 7.0 | 20 | 21/36 | 2.0 | 2.0 | 15 | 24 |
| UTO-505 | 10-500 | 10.5 | 9.0 | 9.0 | 1.0 | 1.0 | 6.0 | 7.0 | 7.5 | 20.0 | 18.0 | 18.0 | 18 | 29/35 | 2.0 | 2.0 | 15 | 100 |
| AC508 | 10-500 | 13.5 | 13.0 | 12.5 | 0.5 | 0.7 | 3.5 | 5.0 | 5.5 | 19.5 | 18.5 | 18.0 | 18 | 33/46 | 1.7 | 1.9 | 15 | 65 |
| AC509 | 5-500 | 13.3 | 12.5 | 12.0 | 0.5 | 0.7 | 4.2 | 5.0 | 5.5 | 21.5 | 20.5 | 20.0 | 18 | 34/45 | 1.7 | 1.9 | 15 | 88 |
| UTO-509 | 5-500 | 14.3 | 13.0 | 12.0 | 0.7 | 1.0 | 4.5 | 5.5 | 6.0 | 22.3 | 20.0 | 20.0 | 18 | 35/45 | 2.0 | 2.0 | 15 | 90 |
| UTO-511 | 5-500 | 16.0 | 15.0 | 15.0 | 1.0 | 1.0 | 2.3 | 2.5 | 3.0 | 1.0 | -2.0 | -3.0 | 23 | 12/16 | 2.0 | 2.0 | 15 | 10 |
| UTO-512 | 5-500 | 21.0 | 20.0 | 19.0 | 1.0 | 1.0 | 2.5 | 3.0 | 3.0 | 8.0 | 7.0 | 7.0 | 27 | 20/25 | 2.0 | 2.0 | 15 | 23 |
| AC513 | 5-500 | 20.0 | 19.5 | 19.0 | 0.5 | 0.8 | 1.9 | 2.3 | 2.8 | 3.5 | 2.0 | 1.5 | 24 | 16/17 | 1.7 | 2.0 | 15 | 14 |
| UTO-514 | 30-200 | 16.0 | 15.0 | 14.5 | 0.8 | 1.0 | 1.9 | 2.0 | 2.5 | -2.0 | -3.0 | -4.0 | 22 | 7/6 | 2.0 | 2.0 | 15 | 8 |
| AC514 | 5-500 | 21.0 | 20.0 | 19.5 | 0.5 | 0.8 | 2.9 | 3.5 | 4.0 | 13.0 | 11.5 | 11.0 | 25 | 24/37 | 1.7 | 2.0 | 15 | 32 |
| UTO-516 | 5-500 | 14.5 | 14.0 | 13.5 | 1.0 | 1.0 | 4.0 | 4.5 | 5.0 | 12.5 | 10.0 | 9.5 | 22 | 24/37 | 2.0 | 2.0 | 15 | 35 |
| UTO-517 | 5-500 | 22.5 | 22.0 | 21.0 | 1.0 | 1.0 | 2.0 | 2.5 | 3.0 | 6.5 | 5.0 | 4.0 | 29 | 15/22 | 2.0 | 2.0 | 15 | 22 |
| AC518 | 5-500 | 28.0 | 26.5 | 26.0 | 0.5 | 0.7 | 4.0 | 4.7 | 5.2 | 19.3 | 18.5 | 17.0 | 36 | 32/50 | 1.7 | 1.8 | 15 | 96 |
| UTO-518 | 5-500 | 13.7 | 13.0 | 12.0 | 0.7 | 1.0 | 5.5 | 6.0 | 6.5 | 24.5 | 22.5 | 22.0 | 17 | 35/36 | 2.0 | 2.0 | 15 | 130 |
| AC519 | 5-500 | 27.5 | 26.5 | 26.0 | 0.5 | 0.7 | 3.5 | 4.5 | 5.0 | 21.8 | 20.5 | 20.0 | 36 | 33/44 | 1.7 | 1.8 | 15 | 127 |
| UTO-519 | 5-500 | 14.3 | 13.0 | 12.0 | 0.7 | 1.0 | 4.4 | 5.5 | 6.0 | 19.0 | 18.0 | 17.0 | 19 | 29/31 | 2.0 | 2.0 | 15 | 70 |
| UTO-520 | 5-500 | 14.5 | 14.0 | 13.0 | 0.7 | 1.0 | 3.5 | 4.5 | 5.0 | 13.0 | 11.0 | 10.0 | 19 | 22/21 | 2.0 | 2.0 | 5 | 33 |
| UTO-521 | 50-500 | 30.0 | 27.0 | 27.0 | 1.0 | 1.0 | 3.0 | 4.0 | 4.5 | 7.0 | 6.0 | 5.5 | 41 | 18/25 | 2.0 | 2.0 | 15 | 38 |
| UTO-523 | 5-500 | 25.5 | 23.0 | 23.0 | 1.0 | 1.0 | 3.5 | 7.0 | 7.0 | 13.5 | 12.0 | 12.0 | 42 | 25/33 | 2.0 | 2.0 | 15 | 80 |
| AC524 | 5-500 | 31.5 | 30.0 | 29.0 | 0.7 | 1.0 | 3.0 | 4.0 | 4.5 | 8.5 | 7.5 | 7.0 | 40 | 20/33 | 1.7 | 2.0 | 15 | 35 |
| UTO-524 | 5-500 | 31.0 | 30.0 | 30.0 | 1.0 | 1.0 | 3.0 | 4.0 | 4.0 | 17.0 | 14.0 | 14.0 | 40 | 27/34 | 2.0 | 2.0 | 15 | 70 |
| AC525 | 5-500 | 31.5 | 30.0 | 29.0 | 0.7 | 1.0 | 3.2 | 4.2 | 4.7 | 12.0 | 10.5 | 10.0 | 40 | 24/37 | 1.7 | 2.0 | 15 | 48 |
| UTO-526 | 10-500 | 28.0 | 26.5 | 26.0 | 0.7 | 1.0 | 3.0 | 4.0 | 4.5 | 21.0 | 19.0 | 18.5 | 33 | 32/42 | 2.0 | 2.0 | 15 | 93 |
| AS529 | 100-500 | 29.5 | 28.0 | 27.0 | 0.7 | 0.9 | 1.0 | 1.2 | 1.4 | 19.5 | 18.0 | 17.5 | 45 | 32/54 | 1.4 | 1.5 | 5 | 185 |
| UTO-533 | 5-500 | 17.0 | 16.0 | 15.0 | 0.7 | 1.0 | 3.5 | 5.0 | 5.5 | 17.0 | 14.0 | 13.0 | 23 | 30/43 | 2.0 | 2.0 | 15 | 53 |
| AC534 | 5-500 | 26.5 | 26.0 | 25.5 | 0.5 | 0.8 | 2.7 | 3.3 | 3.8 | 4.0 | 3.5 | 3.0 | 38 | 12/30 | 1.7 | 1.8 | 5 | 16 |
| AC536 | 5-500 | 28.0 | 27.5 | 27.0 | 0.5 | 0.8 | 3.3 | 3.8 | 4.3 | 15.5 | 15.0 | 14.5 | 37 | 28/46 | 1.7 | 1.8 | 8 | 62 |
| AC538 | 5-500 | 27.5 | 27.0 | 26.5 | 0.5 | 0.8 | 2.8 | 3.5 | 4.0 | 12.5 | 11.5 | 11.0 | 37 | 27/50 | 1.7 | 1.8 | 5 | 47 |
| AC540 | 10-500 | 12.5 | 11.5 | 11.0 | 0.5 | 0.8 | 1.8 | 2.5 | 3.0 | 4.5 | 3.5 | 3.0 | 18 | 17/24 | 1.8 | 2.0 | 15 | 15 |
| AC541 | 20-500 | 15.5 | 14.5 | 14.0 | 0.7 | 1.0 | 2.8 | 3.3 | 4.0 | 6.5 | 5.5 | 5.0 | 37 | 20/26 | 2.0/1.5 | 2.0/1.5 | 15 | 27 |
| AC542 | 20-500 | 17.5 | 16.5 | 16.0 | 0.7 | 1.0 | 3.3 | 3.8 | 4.5 | 14.0 | 13.5 | 13.0 | 36 | 28/35 | 2.0/1.5 | 2.0/1.5 | 15 | 47 |
| AC543 | 10-500 | 11.3 | 10.5 | 10.0 | 0.4 | 0.6 | 2.5 | 3.0 | 3.5 | 10.0 | 9.0 | 8.5 | 19 | 26/38 | 1.8 | 2.0 | 15 | 24 |
| UTO-543 | 10-500 | 11.0 | 10.0 | 9.0 | 1.0 | 1.0 | 2.5 | 2.5 | 3.0 | 8.0 | 6.0 | 6.0 | 17 | 22/30 | 2.0 | 2.0 | 15 | 25 |
| AC544 | 10-500 | 11.5 | 10.5 | 10.0 | 0.4 | 0.6 | 2.7 | 3.3 | 3.8 | 13.5 | 12.5 | 12.0 | 18 | 29/42 | 1.8 | 2.0 | 15 | 35 |
| UTO-544 | 10-500 | 11.0 | 10.0 | 9.0 | 1.0 | 1.0 | 2.5 | 3.0 | 3.5 | 13.0 | 12.0 | 11.0 | 15 | 28/40 | 2.0 | 2.0 | 15 | 36 |
| AC545 | 10-500 | 12.8 | 12.5 | 12.0 | 0.5 | 0.8 | 2.5 | 3.0 | 3.5 | 9.3 | 8.0 | 7.5 | 17 | 25/33 | 1.8 | 2.0 | 15 | 24 |
| UTO-545 | 10-500 | 10.5 | 10.0 | 10.0 | 0.5 | 0.5 | 4.5 | 5.0 | 5.5 | 19.0 | 17.0 | 16.0 | 21 | 32/45 | 2.0 | 2.0 | 15 | 60 |

Current data sheets available on website. Shaded models indicate typical output power ≥+20 dBm.

High Performance 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 |
| Listed by model number | | | | | | | | | | | | | | | | | | |
| UTO-546 | 20-500 | 11.5 | 10.0 | 10.0 | 0.5 | 0.5 | 4.0 | 5.5 | 6.0 | 23.5 | 23.0 | 22.0 | 20 | 35/40 | 2.0 | 2.0 | 15 | 110 |
| AC547 | 10-500 | 13.0 | 12.5 | 12.0 | 0.5 | 0.8 | 3.3 | 3.8 | 4.5 | 15.5 | 14.5 | 14.0 | 17 | 30/42 | 1.8 | 2.0 | 15 | 44 |
| UTO-547 | 10-500 | 12.5 | 11.5 | 11.0 | 0.7 | 0.7 | 2.8 | 3.5 | 4.0 | 19.0 | 18.0 | 17.5 | 16 | 31/47 | 2.0 | 2.0 | 15 | 55 |
| AC548 | 5-500 | 12.5 | 11.5 | 11.0 | 0.4 | 0.6 | 3.7 | 4.5 | 5.0 | 19.0 | 17.8 | 17.0 | 18 | 35/48 | 1.9/1.4 | 2.0/1.5 | 15 | 58 |
| AC552 | 30-500 | 22.0 | 21.0 | 20.5 | 0.5 | 0.7 | 2.4 | 3.0 | 3.5 | 10.0 | 9.0 | 8.0 | 29 | 22/28 | 1.9 | 2.0 | 5 | 16 |
| UTO-554 | 5-500 | 29.0 | 28.0 | 27.0 | 0.7 | 0.7 | 2.7 | 3.0 | 3.5 | 10.0 | 9.0 | 8.5 | 26 | 21/38 | 2.0 | 2.0 | 5 | 40 |
| AC555 | 0.3-500 | 15.0 | 14.0 | 13.5 | 0.5 | 0.7 | 3.8 | 4.5 | 5.0 | 12.5 | 11.0 | 10.5 | 20 | 25/39 | 2.0 | 2.0 | 15 | 34 |
| AC556 | 5-500 | 28.5 | 27.5 | 27.0 | 0.5 | 0.7 | 3.5 | 4.2 | 4.7 | 14.5 | 14.0 | 13.5 | 38 | 28/38 | 1.8 | 2.0 | 15 | 65 |
| AC557 | 0.3-500 | 15.0 | 14.0 | 13.5 | 0.5 | 0.8 | 4.0 | 5.0 | 5.5 | 14.7 | 13.5 | 13.0 | 20 | 28.5/36 | 1.8 | 2.0 | 15 | 44 |
| AC558 | 5-500 | 11.0 | 10.5 | 10.0 | 0.5 | 0.7 | 5.2 | 6.0 | 6.5 | 19.0 | 18.0 | 17.5 | 16 | 32/50 | 1.8 | 1.9 | 15 | 65 |
| AC559 | 5-500 | 11.0 | 10.5 | 10.0 | 0.5 | 0.7 | 5.7 | 6.5 | 7.0 | 22.0 | 21.0 | 20.5 | 16 | 35/49 | 1.8 | 1.9 | 15 | 88 |
| AP560 | 10-500 | 13.0 | 12.5 | 12.0 | 0.5 | 0.7 | 4.6 | 5.5 | 6.0 | 24.5 | 23.5 | 23.0 | 17 | 36/35 | 1.7 | 2.0 | 15 | 130 |
| AP561 | 10-500 | 13.5 | 12.5 | 12.0 | 0.5 | 0.7 | 5.0 | 6.5 | 7.0 | 27.0 | 25.0 | 24.5 | 17 | 41/48 | 1.7/1.9 | 1.8/2.0 | 15 | 175 |
| UTO-561 | 10-500 | 13.0 | 11.0 | 10.0 | 0.7 | 1.0 | 5.5 | 9.0 | 9.5 | 27.0 | 26.0 | 25.5 | 20 | 39/51 | 2.0 | 2.0 | 15 | 190 |
| AC564 | 5-500 | 36.2 | 35.5 | 35.0 | 0.5 | 0.7 | 2.5 | 3.5 | 4.0 | 11.5 | 10.5 | 10.0 | 46 | 23/35 | 1.7 | 1.8 | 15 | 48 |
| AC566 | 5-500 | 32.5 | 32.0 | 31.5 | 0.5 | 0.7 | 2.8 | 3.5 | 4.0 | 16.0 | 15.0 | 14.5 | 40 | 30/47 | 1.7 | 1.8 | 15 | 65 |
| AC572 | 5-500 | 15.2 | 14.0 | 13.5 | 0.5 | 0.7 | 3.4 | 4.0 | 5.0 | 12.5 | 11.5 | 11.0 | 19 | 27/35 | 1.7 | 1.8 | 5 | 29 |
| UTO-572 | 5-500 | 18.5 | 18.0 | 17.0 | 0.5 | 1.0 | 3.0 | 3.5 | 3.7 | 12.0 | 11.0 | 10.0 | 46 | 24/34 | 2.0 | 2.0 | 15 | 32 |
| AC573 | 5-500 | 31.5 | 30.0 | 29.0 | 0.7 | 0.9 | 2.4 | 2.8 | 3.3 | 3.0 | 1.0 | 0.5 | 40 | 15/25 | 1.7 | 1.9 | 15 | 20 |
| UTO-573 | 10-500 | 14.5 | 13.0 | 12.5 | 0.5 | 0.7 | 3.4 | 4.3 | 4.5 | 13.0 | 11.0 | 10.0 | 33 | 23/32 | 1.5 | 1.7 | 15 | 33 |
| AC575 | 5-500 | 21.0 | 20.0 | 19.5 | 0.5 | 0.8 | 2.6 | 3.0 | 3.5 | 10.0 | 8.5 | 8.0 | 25 | 21/31 | 1.7 | 2.0 | 15 | 24 |
| AC576 | 5-500 | 29.0 | 28.0 | 27.5 | 0.5 | 0.7 | 3.3 | 4.0 | 4.5 | 15.0 | 14.5 | 14.0 | 37 | 29/42 | 1.8 | 2.0 | 15 | 65 |
| AC577 | 5-500 | 16.5 | 16.0 | 15.0 | 0.5 | 0.9 | 4.0 | 5.5 | 6.0 | 16.5 | 15.0 | 14.5 | 20 | 30/43 | 1.7 | 2.0 | 15 | 48 |
| AC580 | 10-500 | 22.8 | 21.8 | 21.3 | 0.7 | 0.8 | 2.2 | 2.7 | 3.2 | 9.7 | 7.5 | 7.0 | 29 | 22/27 | 2.0 | 2.0 | 15 | 17 |
| AC581 | 20-500 | 23.0 | 22.0 | 21.5 | 0.7 | 1.0 | 2.8 | 3.7 | 4.3 | 15.0 | 14.0 | 13.5 | 31 | 27/35 | 1.9 | 2.0 | 15 | 31 |
| AC582 | 20-500 | 23.0 | 22.0 | 21.5 | 0.7 | 1.0 | 3.3 | 4.2 | 4.7 | 20.0 | 19.0 | 18.5 | 31 | 33/40 | 1.9 | 2.0 | 15 | 53 |
| AC583 | 10-500 | 30.0 | 29.0 | 28.5 | 0.5 | 0.7 | 1.8 | 2.5 | 3.0 | 0.0 | -1.0 | -2.0 | 41 | 11.5/22 | 1.7 | 1.8 | 5 | 14 |
| ARH609 [^] | 10-600 | 13.8 | 13.0 | 12.0 | 0.6 | 0.7 | 5.0 | 5.5 | 6.0 | 26.0 | 24.5 | 24.0 | 17 | 41/74 | 1.7 | 1.9 | 15 | 235 |
| AC618 | 10-600 | 32.0 | 31.0 | 30.0 | 0.7 | 0.8 | 2.8 | 3.2 | 3.7 | 19.0 | 18.0 | 17.5 | 39 | 32/50 | 1.5 | 1.7 | 12 | 85 |
| AC652 | 10-600 | 10.8 | 10.0 | 9.5 | 0.9 | 1.0 | 1.3 | 1.7 | 2.0 | 18.8 | 18.0 | 17.5 | 17.5 | 32/45 | 1.8 | 2.0 | 5 | 50 |
| AC658 | 10-600 | 31.0 | 30.0 | 29.0 | 0.7 | 0.8 | 2.5 | 3.1 | 3.6 | 15.0 | 14.0 | 13.5 | 39 | 32/38 | 1.5 | 1.7 | 5 | 120 |
| AC688 | 200-600 | 21.0 | 20.3 | 20.0 | 0.8 | 1.0 | 0.9 | 1.1 | 1.4 | 21.5 | 20.5 | 20.0 | 28 | 33/45 | 1.9 | 2.0 | 5 | 85 |
| AP718 | 100-700 | 33.5 | 32.0 | 31.5 | 0.7 | 0.8 | 2.6 | 3.2 | 3.7 | 19.0 | 18.0 | 17.5 | 40 | 33/44 | 1.5 | 1.7 | 12 | 86 |
| AP719 | 10-700 | 27.5 | 26.5 | 26.0 | 0.5 | 0.7 | 3.5 | 4.2 | 4.7 | 24.3 | 23.5 | 23.0 | 38 | 36/50 | 1.9 | 2.0 | 15 | 165 |
| AC751 | 200-700 | 13.0 | 12.5 | 12.0 | 0.4 | 0.6 | 1.9 | 2.4 | 2.9 | 4.8 | 4.0 | 3.5 | 20 | 20/27 | 1.7/1.9 | 1.9/2.0 | 5 | 11 |
| AC829 | 10-800 | 12.0 | 11.5 | 11.0 | 0.3 | 0.4 | 3.0 | 4.0 | 4.7 | 18.5 | 17.0 | 16.5 | 18.5 | 33/41 | 1.8 | 1.9 | 5 | 50 |
| AC838 | 10-800 | 30.0 | 29.0 | 28.0 | 0.7 | 0.9 | 3.0 | 3.5 | 4.0 | 16.0 | 15.0 | 14.5 | 37 | 30/50 | 1.7 | 1.9 | 5 | 73 |
| AC847 | 10-800 | 13.3 | 12.5 | 12.0 | 0.5 | 0.7 | 3.0 | 3.5 | 4.0 | 17.0 | 16.0 | 15.5 | 17.5 | 32/47 | 1.7 | 1.9 | 15 | 44 |
| AC848 | 10-800 | 13.2 | 12.5 | 12.0 | 0.4 | 0.5 | 4.0 | 4.5 | 5.0 | 19.3 | 18.5 | 18.0 | 17 | 34/43 | 1.8 | 2.0 | 15 | 58 |
| AC885 | 800-900 | 20.0 | 18.5 | 17.5 | 0.7 | 0.9 | 1.0 | 1.3 | 1.6 | 13.0 | 12.0 | 11.5 | 36 | 27/42 | 2.0 | 2.0 | 5 | 90 |
| AC936 | 10-900 | 27.5 | 27.0 | 26.5 | 0.6 | 0.8 | 3.3 | 3.8 | 4.5 | 10.0 | 9.0 | 8.5 | 38 | 22/40 | 1.6 | 1.8 | 5 | 35 |
| AC986 | 800-900 | 30.3 | 29.8 | 29.3 | 0.3 | 0.4 | 1.3 | 1.8 | 2.3 | 22.5 | 21.0 | 20.5 | 44 | 33/50 | 1.7 | 1.8 | 15 | 135 |
| UTO-1005 | 5-1000 | 12.6 | 11.0 | 10.5 | 1.0 | 1.0 | 5.0 | 6.0 | 6.5 | 21.0 | 20.0 | 19.0 | 18 | 35/45 | 2.0 | 2.0 | 15 | 90 |
| AC1008 | 5-1000 | 15.5 | 14.8 | 14.3 | 0.4 | 0.5 | 4.5 | 5.5 | 6.0 | 18.5 | 18.0 | 17.5 | 20 | 33/44 | 1.7 | 1.8 | 15 | 85 |
| AC1012 | 0.3-1000 | 16.0 | 15.0 | 14.5 | 0.7 | 0.8 | 3.2 | 3.7 | 4.2 | 9.0 | 7.0 | 7.0 | 20 | 21/33 | 1.7 | 2.0 | 15 | 24 |
| UTO-1013 | 5-1000 | 16.0 | 15.0 | 14.0 | 1.0 | 1.0 | 3.0 | 4.5 | 5.0 | 10.5 | 9.0 | 8.0 | 22 | 20/27 | 2.0 | 2.0 | 15 | 29 |
| AC1015 | 0.3-1000 | 15.0 | 14.0 | 13.5 | 0.7 | 0.8 | 3.4 | 4.0 | 4.5 | 9.0 | 7.0 | 7.0 | 20 | 21/33 | 1.7 | 2.0 | 15 | 24 |

Current data sheets available on website. Shaded models indicate typical output power $\geq +20$ dBm.

High Performance 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 |
| Listed by model number | | | | | | | | | | | | | | | | | | |
| UTO-1502 | 5-1500 | 10.5 | 9.0 | 8.5 | 0.5 | 1.0 | 5.0 | 7.5 | 7.5 | 8.0 | 6.0 | 6.0 | 16 | 19/-- | 2.0 | 2.0 | 15 | 23 |
| AC1508 | 10-1500 | 12.5 | 11.5 | 11.0 | 0.4 | 0.6 | 4.0 | 4.5 | 5.0 | 16.5 | 15.5 | 15.0 | 17 | 30/45 | 1.8 | 2.0 | 15 | 50 |
| UTO-1509 | 10-1500 | 12.0 | 11.5 | 11.0 | 1.0 | 1.0 | 2.5 | 3.0 | 3.5 | 23.0 | 22.0 | 20.0 | 18 | 35/55 | 2.2 | 2.2 | 15 | 100 |
| UTO-1522 | 5-1500 | 20.0 | 18.0 | 17.0 | 1.5 | 1.5 | 4.5 | 5.5 | 6.0 | 13.0 | 11.0 | 10.0 | 36 | 23/-- | 2.0 | 2.0 | 15 | 85 |
| AC1523 | 5-1500 | 14.4 | 13.5 | 13.0 | 0.4 | 0.6 | 2.9 | 3.8 | 4.5 | 4.0 | 2.5 | 2.0 | 19 | 17/23 | 1.8 | 2.0 | 15 | 15 |
| UTO-1524 | 10-1500 | 22.0 | 21.0 | 20.0 | 1.5 | 1.5 | 4.0 | 4.5 | 5.0 | 10.0 | 7.0 | 6.0 | 35 | 19/22 | 2.0 | 2.0 | 15 | 60 |
| AC1525 | 5-1500 | 13.6 | 12.5 | 12.0 | 0.4 | 0.6 | 3.8 | 4.8 | 5.5 | 9.5 | 8.0 | 7.5 | 19 | 23/32 | 1.8 | 2.0 | 15 | 24 |
| AC1526 | 10-1500 | 21.5 | 20.0 | 19.0 | 0.7 | 1.0 | 3.8 | 4.5 | 5.0 | 15.0 | 14.0 | 13.5 | 32 | 28/45 | 1.8 | 2.0 | 15 | 65 |
| AR1526 | 10-1500 | 29.0 | 27.5 | 27.0 | 1.0 | 1.2 | 4.0 | 5.0 | 5.5 | 14.5 | 13.5 | 13.0 | 46 | 27/42 | 1.7 | 1.8 | 15 | 80 |
| AC1527 | 10-1500 | 9.5 | 8.5 | 8.0 | 0.5 | 0.8 | 5.0 | 5.5 | 6.0 | 15.0 | 14.0 | 13.0 | 15 | 31/45 | 1.8 | 2.0 | 15 | 45 |
| AC1528 | 10-1500 | 11.0 | 10.0 | 9.5 | 0.5 | 0.8 | 5.0 | 5.5 | 6.0 | 15.0 | 14.0 | 13.0 | 16 | 30/45 | 1.8 | 2.0 | 15 | 45 |
| AC1529 | 10-1500 | 9.0 | 8.5 | 8.0 | 0.4 | 0.5 | 5.5 | 7.0 | 7.5 | 21.0 | 19.5 | 19.0 | 14 | 34/43 | 1.8 | 2.0 | 15 | 88 |
| AC1532 | 1200-1600 | 12.5 | 12.0 | 11.5 | 0.4 | 0.5 | 2.7 | 3.3 | 4.0 | 12.5 | 12.0 | 11.5 | 19 | 25/33 | 2.0/1.8 | 2.2/2.0 | 15 | 27 |
| AC1556 | 1200-1700 | 28.0 | 26.5 | 26.0 | 1.0 | 1.5 | 1.0 | 1.5 | 2.0 | 14.0 | 13.0 | 12.5 | 42 | 29/42 | 1.9 | 2.0 | 5 | 63 |
| AC1569 | 10-1500 | 17.0 | 16.0 | 15.5 | 0.5 | 0.8 | 5.5 | 7.0 | 7.5 | 21.0 | 19.0 | 19.0 | 29 | 33/52 | 1.7/2.0 | 1.8/2.1 | 15 | 130 |
| UTO-1576 | 10-1500 | 11.5 | 10.5 | 10.0 | 0.5 | 0.7 | 4.2 | 5.0 | 5.5 | 10.5 | 9.0 | 8.5 | 29 | 20/25 | 2.0 | 2.0 | 15 | 30 |
| AC1582 | 5-1500 | 12.5 | 11.8 | 11.0 | 0.5 | 0.7 | 4.0 | 5.0 | 5.5 | 11.0 | 10.5 | 10.0 | 17 | 24/34 | 1.7 | 2.0 | 5 | 31 |
| AC1586 | 1200-1700 | 26.0 | 25.5 | 25.0 | 0.4 | 0.5 | 1.1 | 1.3 | 1.8 | 14.0 | 13.0 | 12.5 | 40 | 27/45 | 1.8 | 2.0 | 15 | 58 |
| AP1588 | 1200-1600 | 25.0 | 24.0 | 23.5 | 1.4 | 1.6 | 1.4 | 2.0 | 2.5 | 24.5 | 24.0 | 23.5 | 45 | 35/58 | 1.8 | 1.9 | 15 | 145 |
| AC1691 | 900-1600 | 17.5 | 16.5 | 16.0 | 0.7 | 0.8 | 1.0 | 1.2 | 1.4 | 21.0 | 20.0 | 29.5 | 22 | 33/47 | 1.3/1.6 | 1.5/1.8 | 5 | 105 |
| AC2005 | 0.3-2000 | 10.8 | 10.0 | 9.5 | 0.7 | 0.8 | 4.4 | 5.0 | 5.5 | 9.0 | 7.5 | 7.0 | 17 | 21/32 | 2.0 | 2.2 | 15 | 24 |
| AC2006 | 0.3-2000 | 10.8 | 10.0 | 9.0 | 0.7 | 0.8 | 5.0 | 5.5 | 6.0 | 11.0 | 10.0 | 9.5 | 17 | 22/35 | 2.0 | 2.2/2.0 | 15 | 34 |
| AP2008 | 10-2000 | 11.5 | 11.0 | 10.5 | 0.5 | 0.7 | 3.0 | 3.5 | 4.0 | 24.5 | 24.0 | 23.0 | 19 | 39/55 | 1.6/1.8 | 1.8/1.9 | 15 | 165 |
| AP2009 | 10-2000 | 11.0 | 10.5 | 10.0 | 0.5 | 0.8 | 3.5 | 4.5 | 5.5 | 28.0 | 26.5 | 26.0 | 19 | 40/50 | 2.0 | 2.0 | 15 | 188 |
| UTO-2012 | 500-2000 | 11.0 | 9.0 | 8.5 | 1.0 | 1.0 | 3.0 | 4.0 | 4.5 | 14.0 | 12.0 | 11.0 | 16 | 23/33 | 2.0 | 2.0 | 15 | 50 |
| AC2017 | 1-2000 | 9.0 | 8.0 | 7.5 | 0.7 | 1.0 | 6.5 | 8.0 | 8.5 | 15.0 | 14.0 | 13.5 | 14 | 30/43 | 1.8 | 2.0 | 15 | 47 |
| AC2023 | 5-2000 | 12.5 | 12.0 | 11.5 | 0.5 | 0.7 | 3.2 | 4.0 | 4.5 | 4.0 | 2.5 | 2.0 | 17 | 16/21 | 2.0 | 2.0 | 15 | 15 |
| UTO-2023 | 10-2000 | 8.5 | 8.0 | 7.5 | 1.0 | 1.0 | 6.5 | 8.5 | 9.5 | 14.5 | 14.0 | 14.0 | 16 | 25/40 | 2.2 | 2.2 | 15 | 50 |
| UTO-2024 | 5-2000 | 16.0 | 15.0 | 14.0 | 1.0 | 1.0 | 4.5 | 5.5 | 6.0 | 6.0 | 5.0 | 4.0 | 31 | 18/30 | 2.0 | 2.0 | 15 | 38 |
| AC2025 | 5-2000 | 12.5 | 12.0 | 11.5 | 0.5 | 0.8 | 3.4 | 4.2 | 4.7 | 8.5 | 7.0 | 7.0 | 18 | 22.5/33 | 2.0 | 2.0 | 15 | 24 |
| UTO-2025 | 100-2000 | 11.0 | 9.5 | 9.0 | 1.0 | 1.0 | 3.0 | 4.5 | 5.5 | 27.0 | 25.0 | 24.0 | 20 | 37/47 | 2.0 | 2.2 | 15 | 175 |
| UTO-2026 | 10-2000 | 15.0 | 13.5 | 13.0 | 1.0 | 1.5 | 6.5 | 7.0 | 7.5 | 20.5 | 19.0 | 18.5 | 28 | 31/45 | 2.0 | 2.0 | 15 | 155 |
| UTO-2027 | 10-2000 | 15.0 | 13.5 | 12.5 | 1.0 | 1.5 | 6.3 | 7.0 | 7.5 | 17.5 | 16.0 | 16.0 | 28 | 30/45 | 2.0 | 2.0 | 15 | 108 |
| AC2028 | 10-2000 | 19.8 | 19.0 | 18.5 | 0.6 | 0.8 | 5.0 | 5.5 | 6.0 | 15.0 | 13.5 | 13.0 | 29 | 28/50 | 1.7 | 1.8 | 5 | 60 |
| UTO-2033 | 1-2000 | 8.5 | 8.0 | 7.5 | 1.0 | 1.0 | 6.5 | 8.5 | 9.5 | 16.0 | 14.0 | 14.0 | 15 | 30/41 | 2.0 | 2.0 | 15 | 50 |
| AC2034 | 10-2000 | 18.0 | 17.0 | 16.0 | 0.7 | 1.0 | 4.0 | 4.8 | 5.3 | 7.0 | 6.5 | 6.0 | 32 | 20/41 | 1.8 | 2.0 | 15 | 34 |
| AR2036 | 10-2000 | 26.5 | 25.5 | 24.0 | 1.2 | 1.4 | 5.5 | 6.5 | 7.0 | 14.5 | 13.0 | 13.0 | 45 | 27.5/43 | 2.0 | 2.0 | 15 | 81 |
| AC2037 | 10-2000 | 9.0 | 8.5 | 7.5 | 0.5 | 0.8 | 5.5 | 6.0 | 6.5 | 15.0 | 14.0 | 13.5 | 15 | 30/43 | 1.8 | 2.0 | 15 | 46 |
| AC2038 | 10-2000 | 9.0 | 8.0 | 7.5 | 0.7 | 1.0 | 5.5 | 6.5 | 7.0 | 18.0 | 17.0 | 17.0 | 14 | 32/47 | 2.0 | 2.0 | 15 | 65 |
| AC2039 | 10-2000 | 9.0 | 8.0 | 7.5 | 0.7 | 1.0 | 6.0 | 7.5 | 8.0 | 20.5 | 19.5 | 19.0 | 14 | 34/44 | 2.0 | 2.0 | 15 | 90 |
| AC2046 | 10-2000 | 20.5 | 19.5 | 19.0 | 0.7 | 1.0 | 4.5 | 5.5 | 6.0 | 15.0 | 14.0 | 13.5 | 32 | 25/41 | 1.8/2.0 | 2.0 | 15 | 58 |
| AP2048 | 10-2000 | 9.0 | 8.0 | 7.5 | 0.5 | 0.8 | 4.8 | 5.5 | 6.0 | 23.5 | 23.0 | 22.5 | 17 | 39/50 | 2.0 | 2.0 | 15 | 150 |
| UTO-2055 | 10-2000 | 9.5 | 8.5 | 7.5 | 0.7 | 1.0 | 5.0 | 6.0 | 6.5 | 11.5 | 10.0 | 9.0 | 15 | 22/30 | 2.0 | 2.0 | 5 | 32 |
| AC2056 | 10-2000 | 19.0 | 18.0 | 17.5 | 0.7 | 1.0 | 4.0 | 5.0 | 5.5 | 9.5 | 7.5 | 7.0 | 31 | 21/38 | 1.8/2.0 | 2.0 | 5 | 34 |
| AC2058 | 200-2000 | 10.5 | 10.0 | 9.5 | 0.5 | 0.7 | 4.0 | 4.5 | 5.0 | 19.0 | 17.0 | 16.5 | 19 | 33/42 | 1.7 | 1.8 | 15 | 75 |
| AC2066 | 10-2000 | 17.0 | 16.0 | 15.0 | 0.7 | 1.0 | 5.3 | 6.2 | 6.7 | 15.0 | 14.0 | 14.0 | 29 | 27.5/43 | 1.8 | 2.0 | 15 | 65 |
| AR2066 | 100-2000 | 19.0 | 18.5 | 18.0 | 0.5 | 0.6 | 3.0 | 3.8 | 4.3 | 20.5 | 19.5 | 19.0 | 37 | 32/55 | 1.7 | 1.9 | 15 | 125 |
| AR2067 | 100-2000 | 21.5 | 20.0 | 19.5 | 0.8 | 1.0 | 2.5 | 3.8 | 4.2 | 22.0 | 21.5 | 21.0 | 36 | 33/62 | 1.9 | 2.0 | 15 | 160 |
| AC2069 | 10-2000 | 15.0 | 14.0 | 13.0 | 0.7 | 1.0 | 6.0 | 7.5 | 8.0 | 20.0 | 18.5 | 18.0 | 28 | 32/48 | 2.0 | 2.0 | 15 | 130 |
| AC2075 | 10-2000 | 10.3 | 9.7 | 9.0 | 0.6 | 0.7 | 2.7 | 3.2 | 3.7 | 16.5 | 15.5 | 15.0 | 19 | 29.5/34 | 1.9 | 2.0 | 15 | 50 |

Current data sheets available on website. Shaded models indicate typical output power ≥+20 dBm.

High Performance 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 |
| Listed by model number | | | | | | | | | | | | | | | | | | |
| AC2078 | 10-2000 | 10.0 | 9.0 | 8.5 | 0.5 | 0.6 | 4.0 | 4.8 | 5.3 | 20.5 | 19.5 | 19.0 | 18 | 34/50 | 2.0 | 2.2 | 15 | 100 |
| AP2079 | 10-2000 | 10.3 | 9.7 | 9.0 | 0.6 | 0.7 | 3.1 | 3.6 | 4.3 | 24.5 | 23.5 | 23.0 | 17 | 38/54 | 1.8 | 2.0 | 15 | 125 |
| AR2087 | 10-2000 | 16.0 | 15.0 | 14.5 | 0.8 | 1.0 | 4.5 | 5.5 | 6.0 | 21.0 | 20.0 | 19.5 | 30 | 34/54 | 1.7 | 2.0 | 15 | 115 |
| AC2088 | 100-2000 | 21.0 | 20.0 | 19.5 | 0.7 | 0.9 | 2.3 | 2.7 | 3.2 | 22.5 | 20.0 | 19.5 | 38 | 34/44 | 2.0 | 2.0 | 15 | 109 |
| AC2091 | 30-2000 | 17.0 | 16.0 | 15.5 | 0.6 | 0.7 | <1.5 | 1.7 | 2.0 | 19.5 | 19.0 | 18.5 | 22 | 33/43 | 1.9 | 2.0 | 5 | 60 |
| AC2092 | 30-2000 | 18.0 | 16.5 | 16.0 | 0.6 | 0.7 | <1.5 | 1.7 | 2.0 | 21.5 | 20.5 | 20.0 | 23 | 38/50 | 1.9 | 2.0 | 5 | 100 |
| AR2098 | 30-2000 | 10.8 | 10.0 | 9.5 | 0.5 | 0.7 | 5.2 | 6.0 | 6.5 | 30.0 | 29.0 | (28.5) | 20 | 42/55 | 1.8 | 2.0 | 15 | 370 |
| AC2205 | 100-2200 | 12.0 | 11.0 | 10.5 | 0.7 | 0.9 | 2.0 | 2.4 | 2.8 | 13.5 | 12.5 | 12.0 | 20 | 28/48 | 2.0 | 2.1 | 5 | 50 |
| UTO-2321 | 1700-2300 | 15.0 | 14.0 | 13.0 | 1.0 | 1.0 | 7.0 | 8.0 | 8.5 | 12.0 | 10.0 | 9.0 | 37 | 20/35 | 2.0 | 2.0 | 15 | 70 |
| AC2327 | 1-2300 | 8 | 7.5 | 7 | 0.7 | 1 | 7 | 8.5 | 9 | 13.5 | 12.5 | 12 | 16 | 27.5/37 | 2.2 | 2.4 | 15 | 44 |
| AC2348 | 10-2300 | 9.0 | 8.5 | 8.0 | 0.5 | 0.8 | 4.0 | 4.8 | 5.3 | 18.0 | 17.5 | 17.0 | 17 | 30/40 | 2.0/1.7 | 2.0/1.8 | 15 | 66 |
| AC2356 | 1700-2300 | 22.0 | 21.0 | 20.5 | 0.9 | 1.0 | 1.3 | 1.6 | 1.9 | 13.0 | 12.0 | 11.0 | 39 | 25/42 | 1.6 | 1.8 | 5 | 40 |
| AC2366 | 10-2300 | 16.0 | 15.0 | 14.0 | 0.7 | 1.0 | 5.4 | 6.2 | 6.7 | 14.5 | 13.5 | 13.5 | 29 | 27/43 | 2.0 | 2.0 | 15 | 65 |
| AC2386 | 1700-2300 | 22.0 | 21.0 | 20.5 | 0.9 | 1.0 | 1.3 | 1.6 | 1.9 | 13.0 | 12.0 | 11.0 | 39 | 25/42 | 1.6 | 1.8 | 15 | 40 |
| AC2426 | 10-2400 | 16.0 | 15.0 | 14.0 | 0.7 | 0.9 | 5.0 | 6.0 | 6.5 | 13.5 | 12.5 | 12.5 | 29 | 23/33 | 2.0 | 2.0 | 15 | 58 |
| AP2509 | 10-2500 | 8.5 | 8.0 | 7.5 | 0.5 | 0.8 | 4.3 | 5.0 | 5.5 | 27.5 | 26.0 | 25.5 | 17 | 40/52 | 1.7 | 1.8 | 15 | 185 |
| AR2538 | 20-2500 | 21.0 | 20.0 | 19.5 | 0.8 | 1.0 | 3.5 | 4.0 | 4.5 | 26.0 | 24.5 | 24.0 | 37 | 39/52 | 1.8 | 2.0 | 15 | 190 |
| AC2546 | 10-2500 | 11.8 | 11.0 | 10.5 | 0.5 | 0.8 | 2.7 | 3.5 | 4.0 | 18.5 | 17.5 | 17.0 | 18 | 31.5/42 | 1.9 | 2.0 | 15 | 56 |
| AC2554 | 1000-2500 | 25.0 | 24.0 | 23.5 | 0.8 | 1.0 | 1.9 | 2.3 | 2.6 | 15.5 | 14.5 | 14.0 | 38 | 26/45 | 1.9/1.7 | 2.0/1.8 | 5 | 75 |
| AC2556 | 2000-2500 | 21.5 | 20.5 | 20.0 | 0.8 | 1.0 | 1.5 | 1.7 | 2.0 | 13.5 | 12.5 | 11.5 | 42 | 27/42 | 1.8 | 1.9 | 5 | 52 |
| AC2564 | 100-2500 | 18.0 | 17.5 | 17.0 | 0.8 | 1.0 | 3.3 | 4.5 | 5.0 | 16.5 | 15.5 | 15.0 | 36 | 27/40 | 1.7 | 2.0 | 15 | 80 |
| AR2564 | 20-2500 | 19.0 | 18.0 | 17.5 | 0.6 | 0.7 | 3.5 | 4.0 | 4.5 | 16.5 | 15.5 | 15.0 | 35 | 27/39 | 1.7 | 1.8 | 15 | 50 |
| AC2566 | 200-2500 | 18.5 | 17.5 | 17.0 | 0.7 | 1.0 | 4.7 | 5.2 | 5.7 | 18.5 | 17.5 | 17.0 | 34 | 31/50 | 2.0 | 2.0 | 15 | 133 |
| AR2568 | 50-2500 | 17.0 | 16.5 | 15.5 | 0.7 | 0.9 | 5.0 | 5.3 | 5.8 | 24.0 | 23.0 | 22.5 | 33 | 35/54 | 1.8/1.7 | 2.0/1.9 | 15 | 185 |
| AR2569 | 50-2500 | 16.8 | 15.8 | 15.0 | 0.5 | 0.7 | 5.3 | 6.0 | 6.5 | 28.0 | 27.0 | 26.5 | 33 | 40/56 | 1.8 | 2.0 | 15 | 283 |
| AC2577 | 10-2500 | 10.8 | 10.0 | 9.5 | 0.5 | 0.7 | 3.3 | 4.0 | 4.5 | 21.0 | 20.0 | 19.5 | 17 | 30/42 | 1.7 | 1.8 | 15 | 100 |
| AC2578 | 10-2500 | 9.0 | 8.5 | 8.0 | 0.5 | 0.6 | 3.8 | 4.5 | 5.0 | 21.0 | 20.0 | 19.5 | 18 | 34/48 | 2.0/1.7 | 2.0/1.8 | 15 | 100 |
| AR2584 | 20-2500 | 18.5 | 18.0 | 17.0 | 0.7 | 0.8 | 3.0 | 3.5 | 4.0 | 15.0 | 14.5 | 14.0 | 36 | 26/41 | 1.7 | 1.8 | 8 | 41 |
| AC2586 | 2000-2500 | 21.5 | 20.5 | 20.0 | 0.8 | 1.0 | 1.5 | 1.7 | 2.0 | 15.5 | 14.5 | 13.5 | 42 | 27/42 | 1.8 | 1.9 | 15 | 452 |
| AR2588 | 50-2500 | 19.0 | 18.0 | 17.0 | 0.5 | 1.0 | 5.0 | 6.0 | 6.5 | 25.0 | 24.5 | 23.5 | 34 | 38.5/58 | 1.8 | 1.9 | 8 | 245 |
| AR2589 | 100-2500 | 20.5 | 19.0 | 18.5 | 0.7 | 0.8 | 3.4 | 4.0 | 5.0 | 28.3 | 27.5 | 27.0 | 34 | 39/55 | 1.8 | 1.9 | 15 | 283 |
| A2CP2596 | 20-2500 | 23.5 | 22.0 | 21.0 | 0.8 | 1.0 | 4.3 | 5.0 | 5.5 | 34.5 | 34.0 | 34.0 | 37 | 45/46 | 2.0 | 2.0 | 28 | 530 |
| AR2634 | 10-2600 | 21.0 | 20.0 | 18.5 | 1.0 | 1.2 | 5.5 | 6.7 | 7.2 | 12.5 | 11.5 | 11.5 | 42 | 23/30 | 2.0 | 2.0 | 15 | 76 |
| AP3007 | 20-3000 | 11.5 | 10.5 | 10.0 | 0.5 | 0.7 | 2.7 | 3.3 | 3.8 | 24.5 | 23.0 | 22.0 | 18.5 | 36/45 | 1.9 | 2.0 | 15 | 126 |
| AP3008 | 20-3000 | 12.5 | 11.0 | 10.5 | 0.7 | 0.9 | 3.0 | 3.8 | 4.3 | 26.0 | 25.0 | 24.5 | 21 | 40/58 | 1.9 | 2.0 | 15 | 167 |
| AP3009 | 20-3000 | 12.0 | 11.0 | 10.5 | 0.6 | 0.7 | 3.0 | 4.2 | 4.8 | 27.5 | 26.5 | 26.0 | 19 | 41/54 | 1.9 | 2.0 | 15 | 190 |
| AP3028 | 20-3000 | 12.0 | 11.0 | 10.5 | 0.5 | 0.8 | 3.0 | 3.7 | 4.2 | 25.5 | 24.5 | 24.0 | 19 | 41/56 | 1.9 | 2.0 | 8 | 195 |
| AC3033 | 1000-3000 | 21.0 | 20.0 | 19.5 | 0.8 | 1.0 | 2.4 | 2.7 | 3.1 | 4.5 | 4.0 | 3.5 | 36 | 16/28 | 1.7 | 1.9 | 3 | 35 |
| AC3035 | 1000-3000 | 21.5 | 20.5 | 20.0 | 0.8 | 1.0 | 2.5 | 2.8 | 3.2 | 8.0 | 6.0 | 5.0 | 36 | 17/34 | 1.7 | 1.9 | 5 | 35 |
| AC3046 | 10-3000 | 10.5 | 10.0 | 9.5 | 0.5 | 0.8 | 2.7 | 3.5 | 4.0 | 16.0 | 15.5 | 15.0 | 17 | 27/35 | 1.9 | 2.0 | 15 | 56 |
| AC3055 | 10-3000 | 10.5 | 10.0 | 9.5 | 0.5 | 0.8 | 2.6 | 3.0 | 3.5 | 17.5 | 17.0 | 16.5 | 18 | 27/35 | 1.9 | 2.0 | 5 | 66 |
| AC3056 | 500-3000 | 19.0 | 18.0 | 17.5 | 0.7 | 0.9 | 3.2 | 4.0 | 4.5 | 17.0 | 15.0 | 14.5 | 36 | 29/45 | 1.7 | 2.0 | 5 | 80 |
| AR3056 | 100-3000 | 19.5 | 18.0 | 17.5 | 0.7 | 0.9 | 3.0 | 4.0 | 4.5 | 17.5 | 16.5 | 16.0 | 33 | 26/46 | 1.8 | 2.0 | 5 | 80 |
| AC3057 | 10-3000 | 11.0 | 10.5 | 10.0 | 0.7 | 0.9 | 3.8 | 5.5 | 6.0 | 20.0 | 19.0 | 18.5 | 17 | 32/43 | 1.9 | 2.0 | 5 | 95 |
| AC3064 | 100-3000 | 18.5 | 17.5 | 16.5 | 0.6 | 0.8 | 3.3 | 4.0 | 4.5 | 16.5 | 15.5 | 15.0 | 36 | 27/46 | 1.9 | 2.1 | 15 | 80 |
| AR3069 | 100-3000 | 18.0 | 17.5 | 17.0 | 0.7 | 0.8 | 5.2 | 6.0 | 6.5 | 27.5 | 27.0 | 26.5 | 35 | 40/55 | 1.8 | 1.9 | 15 | 270 |
| ARS3087 | 200-3000 | 19.0 | 18.5 | 18.0 | 0.8 | 1.0 | 4.0 | 5.5 | 6.0 | 24.0 | 23.0 | 22.5 | 33 | 35/51 | 1.7 | 1.8 | 15 | 165 |
| AS3093 | 400-3000 | 14.8 | 14.0 | 13.5 | 0.6 | 0.7 | <1.7 | 2.0 | 2.5 | 18.5 | 17.5 | 17.0 | 20.5 | 31/42 | 1.8 | 1.9 | 15 | 55 |

Current data sheets available on website. Shaded models indicate typical output power $\geq +20$ dBm. () Indicates maximum temperature of +71°C.

High Performance 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 |
| Listed by model number | | | | | | | | | | | | | | | | | | |
| AS3094 | 400-3000 | 14.8 | 14.0 | 13.5 | 0.6 | 0.7 | <1.7 | 2.2 | 2.7 | 23.8 | 22.5 | 22.0 | 20.5 | 37.5/45 | 1.8 | 1.9 | 15 | 108 |
| AR3098 | 500-3000 | 11.5 | 11.0 | 10.5 | 0.8 | 1.2 | 3.5 | 4.5 | 5.0 | 29.5 | 28.5 | 28.0 | 21 | 43/57 | 1.7 | 1.8 | 15 | 335 |
| AP3509 | 100-3500 | 8.5 | 8.0 | 7.5 | 0.6 | 0.7 | 5.5 | 6.5 | 7.0 | 27.0 | 26.0 | 25.5 | 16 | 38/48 | 1.8/2.2 | 2.0/2.3 | 15 | 190 |
| AC3547 | 10-3500 | 11.0 | 10.0 | 9.5 | 0.7 | 0.8 | 3.5 | 4.5 | 5.0 | 20.0 | 18.5 | 1.0 | 17 | 33/48 | 1.9 | 2.0 | 15 | 75 |
| AC3556 | 3000-3600 | 20.5 | 19.5 | 19.0 | 0.8 | 1.0 | 1.2 | 1.4 | 1.7 | 12.5 | 11.5 | 11.0 | 43 | 25/42 | 1.8 | 1.9 | 5 | 45 |
| AR3569 | 100-3500 | 17.5 | 16.0 | 15.5 | 0.7 | 0.8 | 5.2 | 6.0 | 6.5 | 27.5 | 26.5 | 26.0 | 36 | 36/44 | 1.8 | 1.9 | 15 | 275 |
| AC3579 | 10-3500 | 8.3 | 7.5 | 7.0 | 0.5 | 0.8 | 4.8 | 5.5 | 6.0 | 22.0 | 20.5 | 19.5 | 16 | 36/52 | 1.8 | 2.0 | 15 | 115 |
| AC3586 | 3000-3600 | 19.0 | 18.0 | 17.5 | 0.8 | 1.0 | 1.2 | 1.4 | 1.7 | 12.5 | 11.5 | 11.0 | 43 | 25/42 | 1.8 | 1.9 | 15 | 45 |
| AS3594 | 20-3500 | 13.8 | 13.3 | 12.8 | 0.5 | 0.7 | 1.9 | 2.5 | 2.8 | 24.0 | 22.5 | 22.0 | 19 | 35/45 | 1.7 | 1.8 | 15 | 105 |
| AR4019 | 10-4000 | 16.0 | 15.0 | 14.5 | 0.6 | 0.8 | 5.0 | 6.5 | 7.0 | 21.8 | 19.0 | 18.5 | 31 | 34/55 | 1.8 | 2.0 | 15 | 200 |
| AR4029 | 200-4000 | 22.0 | 20.5 | 20.0 | 0.8 | 1.0 | 2.5 | 3.0 | 3.5 | 26.0 | 25.0 | 24.5 | 40 | 38/53 | 1.9 | 2.0 | 15 | 188 |
| AC4041 | 1000-4000 | 10.3 | 9.5 | 9.0 | 0.5 | 0.6 | 2.8 | 3.5 | 4.3 | 18.0 | 17.0 | 16.5 | 18 | 30/45 | 1.8 | 1.9 | 15 | 62 |
| AC4045 | 800-4000 | 18.5 | 17.0 | 16.0 | 0.8 | 1.0 | 3.5 | 4.5 | 5.0 | 20.0 | 19.0 | 18.5 | 40 | 30/43 | 1.8 | 1.9 | 15 | 120 |
| AP4048 | 1000-4000 | 16.8 | 16.0 | 15.5 | 0.6 | 0.7 | 4.0 | 4.5 | 5.0 | 24.0 | 23.0 | 22.5 | 38 | 35/52 | 1.9 | 2.0 | 15 | 225 |
| AR4048 | 1000-4000 | 16.8 | 16.0 | 15.5 | 0.6 | 0.7 | 4.0 | 4.5 | 5.0 | 24.0 | 23.0 | 22.5 | 38 | 35/52 | 1.9 | 2.0 | 15 | 225 |
| AC4052 | 1000-4000 | 25.0 | 23.0 | 22.5 | 0.8 | 0.9 | 2.2 | 3.2 | 3.6 | 15.0 | 13.0 | 13.0 | 38 | 26/36 | 1.8 | 1.9 | 5 | 68 |
| AC4054 | 800-4000 | 20.0 | 19.0 | 18.0 | 0.7 | 0.9 | 3.0 | 3.5 | 4.0 | 16.5 | 15.5 | 15.0 | 41 | 25/36 | 1.7 | 1.9 | 5 | 70 |
| AC4056 | 800-4000 | 17.5 | 16.5 | 15.5 | 0.8 | 0.9 | 3.5 | 4.0 | 4.5 | 14.5 | 13.0 | 12.5 | 41 | 24/42 | 1.8 | 2.0 | 5 | 65 |
| AC4064 | 800-4000 | 20.0 | 19.0 | 18.0 | 0.7 | 0.9 | 3.0 | 3.5 | 4.0 | 16.0 | 15.0 | 14.5 | 39 | 23/37 | 1.8 | 2.0 | 15 | 85 |
| AC4066 | 800-4000 | 20.0 | 19.0 | 17.5 | 0.7 | 0.9 | 3.3 | 4.0 | 4.5 | 20.0 | 19.5 | 19.0 | 41 | 31/54 | 1.7 | 1.9 | 15 | 135 |
| AC4079 | 100-4000 | 8.3 | 7.5 | 7.0 | 0.5 | 0.8 | 4.8 | 5.5 | 6.0 | 22.0 | 20.5 | 20.0 | 16 | 35/55 | 1.8 | 2.0 | 15 | 115 |
| AC4083 | 1000-4000 | 18.5 | 18.0 | 17.0 | 0.7 | 0.8 | 3.0 | 3.5 | 4.0 | 12.5 | 12.0 | 11.5 | 40 | 24/41 | 1.7 | 1.9 | 8 | 30 |
| AC4086 | 800-4000 | 20.0 | 19.0 | 18.0 | 0.7 | 1.0 | 3.8 | 4.3 | 4.8 | 20.5 | 20.0 | 19.5 | 39 | 30/42 | 1.8/2.0 | 1.9/2.1 | 15 | 60 |
| AC4088 | 800-4000 | 19.5 | 19.0 | 18.5 | 0.7 | 0.9 | 4.3 | 4.8 | 5.2 | 21.5 | 20.5 | 20.0 | 38 | 34/52 | 1.8 | 1.9 | 15 | 92 |
| A2CP4121 | 300-4000 | 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 | 800-4000 | 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 |
| PSA-4132 | 1000-4000 | 22.0 | 20.0 | 19.0 | 1.0 | 1.0 | 4.5 | 5.5 | 6.5 | 18.5 | 17.0 | 16.0 | 34 | 29/50 | 2.0 | 2.0 | 8 | 150 |
| AS4221 | 1000-4200 | 13.0 | 12.0 | 11.5 | 0.8 | 1.0 | 1.8 | 2.3 | 2.7 | 14.0 | 13.0 | 12.5 | 20 | 26/42 | 2.0 | 2.0 | 15 | 40 |
| AC4545 | 800-4500 | 17.2 | 16.5 | 15.5 | 0.8 | 0.9 | 4.0 | 5.0 | 5.5 | 17.5 | 16.5 | 15.5 | 36 | 29/40 | 1.8 | 1.9 | 15 | 85 |
| AS5002 | 300-5000 | 21.0 | 19.5 | 19.0 | 0.8 | 0.9 | 2.2 | 2.7 | 3.2 | 16.0 | 15.0 | 14.5 | 39 | 25/32 | 1.9/1.7 | 2.0/1.8 | 15 | 88 |
| A2CP5008 | 2000-5000 | 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 | 2000-5000 | 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 | 1000-5000 | 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 |
| AS5066 | 1000-5000 | 19.5 | 18.5 | 17.0 | 0.7 | 0.85 | 4.0 | 4.5 | 5.0 | 20.0 | 19.0 | 17.5 | 36 | 35/60 | 1.9 | 2.0 | 15 | 160 |
| AC5079 | 100-5000 | 7.5 | 6.8 | 6.0 | 0.8 | 0.9 | 4.7 | 5.7 | 6.3 | 20.5 | 17.5 | 16.5 | 15 | 33/55 | 1.9 | 2.0 | 15 | 115 |
| A2CP5121 | 300-5000 | 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 |
| AS6004 | 2000-6000 | 20.5 | 19.5 | 19.0 | 0.8 | 1.0 | 2.7 | 3.0 | 3.5 | 19.0 | 17.0 | 16.0 | 35 | 30/38 | 2.0 | 2.1 | 15 | 138 |
| A2CP6005 | 2000-6000 | 23.0 | 21.5 | 21.0 | 1.1 | 1.2 | 0.95 | 1.3 | 1.5 | 12.5 | 10.5 | 10.0 | >40 | 24/32 | 1.95/1.9 | 2.0/1.95 | 5 | 97 |
| A2CP6008 | 2000-6000 | 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 | 10-6000 | 24.0 | 23.5 | 22.5 | 1.3 | 1.4 | 4.5 | 5.0 | 5.5 | 25.0 | 24.0 | 23.5 | 50 | 34/54 | 2.2/2.6 | 2.4/2.8 | 15 | 300 |
| AS6043 | 10-6000 | 15.0 | 14.5 | 14.0 | 0.7 | 0.9 | 4.2 | 4.8 | 5.3 | 15.5 | 14.5 | 14.0 | 34 | 27/45 | 1.9 | 2.0 | 15 | 105 |
| AS6045 | 10-6000 | 14.0 | 12.5 | 12.0 | 0.8 | 1.0 | 5.0 | 5.5 | 6.0 | 19.0 | 18.0 | 17.5 | 34 | 30/48 | 1.7 | 1.9 | 20 | 140 |

Current data sheets available on website. Shaded models indicate typical output power ≥+20 dBm.

High Performance 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 |
| Listed by model number | | | | | | | | | | | | | | | | | | |
| AS6054 | 1000-6000 | 17.5 | 16.5 | 16.0 | 1.0 | 1.4 | 4.3 | 4.8 | 5.2 | 19.0 | 17.5 | 17.0 | 33 | 30/58 | 1.9 | 2.0 | 5 | 110 |
| AS6063 | 2000-6000 | 16.0 | 15.0 | 14.5 | 0.8 | 0.9 | 4.5 | 5.5 | 6.0 | 19.0 | 18.0 | 17.5 | 35 | 31/50 | 2.0/1.9 | 2.1/2.0 | 15 | 105 |
| AS6064 | 1000-6000 | 17.5 | 16.5 | 16.0 | 1.0 | 1.4 | 3.5 | 4.8 | 5.2 | 19.0 | 17.5 | 17.0 | 37 | 28/41 | 1.9 | 2.0 | 15 | 110 |
| AS6066 | 1000-6000 | 17.5 | 16.0 | 15.5 | 1.0 | 1.4 | <4.5 | 5.5 | 6.0 | 20.0 | 19.0 | 18.5 | 37 | 30/56 | 2.0 | 2.1 | 15 | 132 |
| A2CP6115 | 500-6000 | 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 | 1000-6000 | 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 |
| PSA-6232 | 2000-6000 | 20.0 | 18.0 | 17.0 | 1.0 | 1.5 | 4.3 | 5.5 | 7.0 | 19.0 | 17.0 | 16.0 | 36 | 27/45 | 2.0 | 2.0 | 8 | 150 |
| A2CP6239 | 2000-6000 | 20.0 | 19.0 | 18.5 | 1.25 | 1.5 | 4.0 | 4.5 | 5.0 | 32.0 | 31.5 | 31.0 | 40 | 42/57 | 1.8 | 2.0 | 10 | 800 |
| AS7004 | 100-7000 | 20.0 | 18.5 | 18.0 | 1.0 | 1.1 | 2.5 | 3.0 | 3.5 | 19.5 | 18.5 | 18.0 | 40 | 27/38 | 1.9 | 2.0 | 15 | 135 |
| ACP7019 | 3000-7000 | 14.0 | 13.2 | 12.7 | 0.8 | 1.0 | 3.6 | 4.5 | 5.2 | 27.5 | 26.5 | 26.0 | 24 | 35/55 | 1.9 | 2.0 | 12 | 250 |
| A3CP7029 | 3000-7000 | 28.5 | 26.5 | 25.5 | 1.0 | 1.2 | 2.8 | 4.0 | 4.5 | 27.5 | 26.5 | 26.0 | 48 | 35/45 | 1.9 | 2.0 | 12 | 411 |
| AS8002 | 100-8000 | 19.5 | 18.0 | 17.5 | 0.8 | 1.2 | 2.5 | 3.3 | 3.8 | 17.0 | 15.5 | 15.0 | 40 | 28/39 | 1.9 | 2.0 | 15 | 92 |
| ACP8017 | 3000-8000 | 11.5 | 11.0 | 10.5 | 0.7 | 1.0 | 4.2 | 5.2 | 5.7 | 21.5 | 20.0 | 21.0 | 27 | 31/48 | 1.9 | 2.0 | 12 | 125 |
| A3CP8027 | 3000-8000 | 23.0 | 22.0 | 21.3 | 1.25 | 1.4 | 4.0 | 5.0 | 5.5 | 21.0 | 20.0 | 19.5 | 50 | 32/48 | 1.9 | 2.0 | 12 | 225 |
| ACP8036 | 2000-8000 | 12.0 | 11.0 | 10.5 | 0.8 | 1.5 | 4.2 | 4.8 | 5.3 | 25.5 | 24.0 | 23.5 | 28 | 35/52 | 1.9 | 2.0 | 12 | 150 |
| ACP8037 | 2000-8000 | 12.0 | 11.0 | 10.5 | 0.8 | 1.5 | 4.2 | 4.8 | 5.3 | 28.0 | 26.5 | 26.0 | 28 | 34/50 | 2.0 | 2.0 | 12 | 250 |
| ACP8039 | 2000-8000 | 10.8 | 10.0 | 9.5 | 0.8 | 1.5 | 4.0 | 4.5 | 5.0 | 30.0 | 28.5 | 28.0 | 27 | 38/56 | 1.6 | 1.7 | 12 | 410 |
| A3CP8048 | 2000-8000 | 25.0 | 22.5 | 21.5 | 1.0 | 1.0 | 4.4 | 5.5 | 6.5 | 28.0 | 26.5 | 26.0 | 55 | 35/53 | 2.0 | 2.0 | 12 | 400 |
| A3CP8049 | 2000-8000 | 22.5 | 21.5 | 20.5 | 0.8 | 1.0 | 4.4 | 5.0 | 5.5 | 29.5 | 28.5 | 28.0 | 42 | 38/55 | 2.0 | 2.1 | 12 | 550 |
| | Frequency Range GHz | | | | | | | | | | | | | | | | | |
| ACP11039 | 6.0-11.0 | 8.5 | 7.5 | 7.0 | 0.8 | 1.0 | 4.0 | 6.0 | 6.5 | 30.0 | 28.5 | 28.0 | 25 | 38/56 | 1.9 | 2.0 | 12 | 410 |
| A2CP11039 | 5.0-11.0 | 12.0 | 11.5 | 11.0 | 0.8 | 1.0 | 4.0 | 4.5 | 5.0 | 33.0 | 32.5 | 32.0 | 40 | 42/57 | 1.8 | 2.0 | 10 | 1500 |
| A2CP11049 | 6.0-11.0 | 18.5 | 17.5 | 16.5 | 0.8 | 1.0 | 4.0 | 4.5 | 5.0 | 30.0 | 28.5 | 28.0 | 52 | 38/56 | 1.8 | 2.0 | 12 | 590 |
| ACP12013 | 6.0-12.0 | 13.0 | 11.5 | 12.0 | 0.8 | 1.0 | 3.2 | 3.7 | 4.2 | 14.0 | 13.5 | 13.0 | 22 | 28/47 | 2.0 | 2.0 | 8 | 44 |
| ACP12015 | 6.0-12.0 | 12.5 | 11.5 | 11.0 | 0.8 | 1.0 | 2.5 | 3.0 | 3.5 | 21.0 | 20.0 | 19.5 | 25 | 32/43 | 1.9 | 2.0 | 8 | 75 |
| ACP12017 | 6.0-12.0 | 12.5 | 11.0 | 10.5 | 1.0 | 1.2 | 3.3 | 3.8 | 4.5 | 25.5 | 23.5 | 22.5 | 23 | 37/50 | 1.9 | 2.0 | 10 | 105 |
| ACP12019 | 6.0-12.0 | 10.5 | 9.5 | 8.5 | 1.0 | 1.2 | 4.1 | 4.6 | 5.1 | 28.0 | 26.5 | 26.0 | 24 | 39/52 | 2.0 | 2.0 | 10 | 210 |
| A2CP12024 | 6.0-12.0 | 24.0 | 23.0 | 22.5 | 1.5 | 1.7 | 3.2 | 3.7 | 4.2 | 13.5 | 12.5 | 12.0 | 35 | 20/30 | 2.0 | 2.0 | 8 | 84 |
| A2CP12026 | 6.0-12.0 | 25.0 | 24.0 | 23.5 | 1.5 | 1.7 | 2.5 | 3.0 | 3.5 | 21.0 | 20.0 | 19.5 | 50 | 27/45 | 2.0 | 2.0 | 8 | 130 |
| A2CP12028 | 6.0-12.0 | 24.5 | 23.0 | 22.5 | 1.5 | 1.6 | 3.3 | 3.8 | 4.5 | 25.0 | 23.5 | 23.0 | 45 | 34/52 | 1.8 | 1.9 | 10 | 162 |
| A2CP12029 | 6.0-12.0 | 23.0 | 20.5 | 20.0 | 1.0 | 1.2 | 4.0 | 4.5 | 5.0 | 27.5 | 26.5 | 26 | 35 | 37/51 | 2.0 | 2.0 | 10 | 335 |
| ACP14012 | 6.0-14.0 | 10.5 | 10.0 | 9.5 | 1.0 | 1.0 | 3.0 | 4.0 | 4.5 | 14.5 | 13.0 | 12.5 | 20 | 26/35 | 2.0 | 2.0 | 5 | 43 |
| ACP14016 | 6.0-14.0 | 11.2 | 10.5 | 9.5 | 0.8 | 1.3 | 3.2 | 4.0 | 4.5 | 16.0 | 14.0 | 13.5 | 21 | 26/45 | 2.0 | 2.0 | 5 | 65 |
| ACP14021 | 6.0-14.0 | 10.3 | 9.7 | 9.0 | 0.6 | 0.6 | 3.8 | 4.5 | 6.0 | 25.0 | 23.5 | 23.0 | 25 | 33/50 | 2.0/1.8 | 2.0/1.9 | 12 | 117 |
| ACP14025 | 8.0-14.0 | 7.5 | 6.5 | 6.0 | 0.8 | 1.0 | 3.8 | 5.0 | 5.5 | 28.5 | 27.5 | 27.0 | 25 | 34/53 | 2.0/1.7 | 2.0/1.8 | 10 | 300 |
| ACP14029 | 8.0-14.0 | 6.5 | 5.5 | 5.0 | 1.0 | 1.0 | 5.0 | 6.5 | 7.0 | 29.0 | 28.3 | 27.9 | 25 | 37/60 | 2.0 | 2.0 | 12 | 350 |
| A2CP14212 | 8.0-14.0 | 21.0 | 20.5 | 19.5 | 1.0 | 1.0 | 2.8 | 3.8 | 4.2 | 15.5 | 15.0 | 14.0 | 43 | 28/40 | 2.0 | 2.0 | 5 | 85 |
| A2CP14216 | 8.0-14.0 | 21.0 | 20.0 | 19.5 | 1.0 | 1.0 | 4.3 | 5.0 | 5.0 | 19.0 | 18.0 | 17.0 | 45 | 27/32 | 2.0 | 2.0 | 5 | 130 |
| A2CP14221 | 8.0-14.0 | 21.3 | 20.2 | 19.0 | 1.5 | 1.5 | 3.2 | 4.0 | 5.0 | 25.0 | 23.0 | 22.5 | 45 | 33/43 | 2.0 | 2.0 | 12 | 185 |
| A2CP14225 | 8.0-14.0 | 18.0 | 16.5 | 15.0 | 0.8 | 1.0 | 4.5 | 5.0 | 6.0 | 28.0 | 27.0 | 26.5 | 45 | 40/54 | 2.0 | 2.0 | 12 | 330 |
| A2CP14229 | 8.0-14.0 | 14.0 | 12.0 | 11.5 | 1.0 | 1.0 | 6.0 | 6.5 | 7.0 | 29.0 | 28.3 | 27.9 | 25 | 42/60 | 1.8 | 2.0 | 12 | 560 |
| A2CP14639 | 6.0-14.0 | 11.0 | 10.5 | 10.0 | 0.8 | 1.0 | 4.0 | 4.5 | 5.0 | 33.0 | 32.5 | 32.0 | 40 | 42/57 | 1.8 | 2.0 | 15 | 1500 |

Current data sheets available on website. Shaded models indicate typical output power $\geq +20$ dBm. *Class H and Class K not available.

High Performance Amplifiers

Typical and Guaranteed Specifications—50 Ω System

| 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 |
| Listed by model number | | | | | | | | | | | | | | | | | | |
| ACP16012 | 6.0-16.0 | 9.5 | 8.5 | 8.0 | 1.0 | 1.0 | 3.5 | 4.7 | 5.2 | 15.2 | 13.5 | 13.0 | 23 | 27/40 | 2.0 | 2.0 | 5 | 45 |
| ACP16016 | 6.0-16.0 | 10.5 | 9.5 | 8.5 | 1.0 | 1.0 | 3.5 | 4.5 | 5.6 | 15.3 | 14.0 | 13.5 | 27 | 24/38 | 2.0 | 2.0 | 5 | 65 |
| ACP16021 | 8.0-16.0 | 9.5 | 8.5 | 8.0 | 1.0 | 1.0 | 3.4 | 4.5 | 5.2 | 24.0 | 22.0 | 21.5 | 25 | 30/45 | 2.0/1.7 | 2.0/1.8 | 12 | 117 |
| ACP18025 | 8.0-16.0 | 7.5 | 6.5 | 6.0 | 0.8 | 1.0 | 4.3 | 5.5 | 6.0 | 29.0 | 28.0 | 27.5 | 20 | 42/65 | 1.6 | 1.8 | 12 | 253 |
| A2CP16212 | 6.0-16.0 | 19.0 | 18.4 | 17.0 | 1.5 | 1.5 | 3.2 | 3.7 | 4.2 | 15.0 | 13.5 | 13.0 | 45 | 28/39 | 2.0 | 2.1 | 5 | 90 |
| A2CP16216 | 6.0-16.0 | 19.0 | 18.0 | 17.0 | 1.5 | 1.5 | 3.5 | 4.2 | 5.0 | 19.0 | 18.0 | 17.0 | 35 | 25/37 | 2.0 | 2.0 | 12 | 125 |
| A2CP16221 | 8.0-16.0 | 20.0 | 18.5 | 17.5 | 1.1 | 1.2 | 3.8 | 4.5 | 5.0 | 24.0 | 22.7 | 21.7 | 50 | 32/40 | 2.0 | 2.1 | 12 | 179 |
| A2CP16225 | 8.0-16.0 | 17.0 | 15.0 | 14.5 | 1.5 | 1.5 | 4.2 | 4.7 | 5.2 | 28.0 | 26.5 | 26.0 | 35 | 36/48 | 2.0 | 2.0 | 12 | 325 |
| ACP17149 | 14.0-17.0 | 8.0 | 7.0 | 6.0 | 0.8 | 1.0 | 7.0 | 8.0 | 9.0 | 32.5 | 32.0 | 31.5 | 20 | 39/50 | 2.0 | 2.0 | 12/5 | 700 |
| ACP18012 | 8.0-18.0 | 8.5 | 7.5 | 7.0 | 0.8 | 1.0 | 4.0 | 5.0 | 5.5 | 15.0 | 13.5 | 13.0 | 23 | 25/38 | 2.0 | 2.0 | 5 | 45 |
| ACP18015 | 8.0-18.0 | 9.2 | 8.5 | 8.0 | 0.8 | 1.0 | 4.5 | 7.0 | 7.5 | 14.0 | 12.0 | 11.5 | 25 | 23/31 | 2.0 | 2.0 | 5 | 63 |
| ACP18021 | 10.0-18.0 | 8.5 | 7.0 | 6.5 | 1.0 | 1.0 | 4.0 | 5.7 | 6.2 | 23.5 | 21.5 | 21.0 | 20 | 32/45 | 2.0 | 2.0 | 12 | 115 |
| ACP18025 | 10.0-18.0 | 6.5 | 5.7 | 5.2 | 1.2 | 1.2 | 5.0 | 6.8 | 7.6 | 28.0 | 26.5 | 26.0 | 20 | 36/45 | 2.0 | 2.0 | 12 | 250 |
| A2CP18212 | 8.0-18.0 | 17.0 | 16.0 | 15.0 | 1.5 | 1.5 | 4.4 | 5.7 | 7.3 | 15.0 | 13.0 | 11.5 | 35 | 24/39 | 2.0 | 2.0 | 12 | 90 |
| A2CP18216 | 8.0-18.0 | 18.0 | 17.0 | 15.0 | 1.5 | 1.5 | 4.4 | 5.7 | 7.3 | 15.5 | 14.0 | 13.0 | 35 | 22/31 | 2.0 | 2.0 | 12 | 110 |
| A2CP18221 | 10.0-18.0 | 17.5 | 16.5 | 16.0 | 1.5 | 1.5 | 4.4 | 5.7 | 7.5 | 23.5 | 21.5 | 21.0 | 35 | 30/41 | 2.0 | 2.0 | 12 | 185 |
| A2CP18225 | 10.0-18.0 | 16.0 | 14.5 | 14.0 | 1.5 | 1.5 | 4.5 | 5.5 | 6.0 | 25.5 | 24.0 | 23.5 | 35 | 35/44 | 2.0 | 2.0 | 10 | 250 |
| ACP18603 | 6.0-18.0 | 9.0 | 8.0 | 7.0 | 1.0 | 1.0 | 4.5 | 5.0 | 5.5 | 15.0 | 13.5 | 13.0 | 20 | 23/31 | 2.0 | 2.0 | 8 | 60 |
| ACP18605 | 6.0-18.0 | 8.0 | 7.5 | 6.0 | 1.0 | 1.0 | 4.5 | 6.0 | 7.0 | 25.0 | 23.5 | 23.0 | 20 | 30/41 | 2.0 | 2.0 | 8 | 110 |
| ACP18606 | 6.0-18.0 | 12.0 | 11.0 | 10.0 | 1.0 | 1.0 | 4.5 | 5.5 | 6.0 | 20.0 | 18.5 | 17.5 | 20 | 26/33 | 2.0 | 2.0 | 8 | 80 |
| ACP18609 | 6.0-18.0 | 6.0 | 5.5 | 5.0 | 1.0 | 1.0 | 5.0 | 6.5 | 7.0 | 28.5 | 27.0 | 26.0 | 20 | 36/45 | 2.0 | 2.0 | 10 | 300 |
| ACP18610 | 6.0-18.0 | 8.0 | 6.5 | 6.0 | 1.0 | 1.0 | 1.8 | 2.0 | 2.5 | 10.0 | 8.0 | 6.0 | 20 | 16/30 | 2.0 | 2.0 | 5 | 20 |
| A2CP18615 | 6.0-18.0 | 21.0 | 19.0 | 18.0 | 1.5 | 1.5 | 4.5 | 6.0 | 7.0 | 20.0 | 18.5 | 17.5 | 35 | 26/33 | 2.0 | 2.0 | 8 | 180 |
| A2CP18620 | 6.0-18.0 | 16.0 | 14.0 | 13.0 | 1.5 | 1.5 | 1.8 | 2.0 | 2.5 | 10.0 | 8.0 | 6.0 | 35 | 16/30 | 2.0 | 2.0 | 5 | 40 |
| A2CP18625 | 6.0-18.0 | 17.0 | 15.5 | 14.0 | 1.5 | 1.5 | 4.5 | 5.5 | 6.0 | 25.0 | 23.5 | 23.0 | 35 | 30/41 | 2.0 | 2.0 | 8 | 170 |
| A2CP18629 | 6.0-18.0 | 15.0 | 13.5 | 12.5 | 1.5 | 1.5 | 4.5 | 6.5 | 7.0 | 28.5 | 27.0 | 26.0 | 35 | 36/45 | 2.0 | 2.0 | 8 | 350 |
| ACP20012 | 6.0-20.0 | 9.0 | 8.0 | 7.0 | 1.5 | 1.5 | 4.5 | 5.5 | 6.0 | 15.0 | 13.5 | 13.0 | 20 | 23/31 | 2.0 | 2.0 | 8 | 60 |
| ACP20015 | 2.0-20.0 | 10.0 | 9.0 | 8.5 | 1.3 | 1.5 | 4.5 | 5.5 | 6.0 | 16.0 | 15.0 | 14.0 | 30 | 26/29 | 2.0 | 2.0 | 5 | 76 |
| ACP20215 | 2.0-20.0 | 20.0 | 18.5 | 17.0 | 1.5 | 1.6 | 4.8 | 5.8 | 6.3 | 18.0 | 15.0 | 14.0 | 55 | 28/45 | 2.0 | 2.1 | 5 | 156 |

High Performance Medium Broadband Amplifiers

Typical and Guaranteed Specifications—50 Ω System

| Model | Frequency Range MHz | Gain dB Typ. | Noise Figure dB Typ. | P1dB dBm Typ. | P3dB dBm Typ. | P3dB Watts Typ. | IP3/IP2 Pout dBm Typ. | Preamp D.C. Volts Nom. | Preamp D.C. mA Max. | D.C. Volt Nom. | DC Amps Q/@P3dB Typ. | Pkg. Type |
|-------------------------------|---------------------|--------------|----------------------|---------------|---------------|-----------------|-----------------------|------------------------|---------------------|----------------|----------------------|-----------|
| Listed by model number | | | | | | | | | | | | |
| AVP598 | 20-400 | 16.5 | 2.5 | 38 | 43.2 | 20.9 | 50/64/40 | N/A | N/A | 28 | 0.85/1.5 | A |
| AVP514 | 20-400 | 40 | 3.5* | 38 | 43.2 | 20.9 | 50/62/40 | 12 | 185 | 28 | 1.25/1.95 | A |
| AVP2515 | 600-2600 | 17 | 4.5 | 35 | 41 | 12.6 | 48/50/37 | N/A | N/A | 28 | 0.85/1.50 | B |
| AVP2524 | 600-2600 | 41 | 4.5 | 35 | 41 | 12.6 | 47/48/37 | 15 | 185 | 28 | 1.25/1.9 | B |
| AVP2030 | 650-2200 | 16 | 4.5 | 39 | 44 | 25.1 | 53/65/40 | N/A | N/A | 28 | 0.85/2.6 | B |
| AVP2034 | 650-2200 | 40 | 4.5 | 39 | 44 | 25.1 | 52/62/40 | 15 | 370 | 28 | 1.25/3.1 | B |
| AVP2050^ | 900-2000 | 14 | 4 | 42 | 48 | 63.1 | 55/68/43 | N/A | N/A | 28 | 1.6/5.50 | C |

All specifications subject to change. * Freq ≥ 100 MHz ^ Case temp. should not exceed +55°C long term with DC current above 3 amps

Current data sheets available on website. Shaded models indicate typical output power ≥ +20 dBm. *Class H and Class K not available.

High Performance Amplifiers

Typical and Guaranteed Specifications—50 Ω System

| Model | Frequency Range GHz | Small Signal Gain dB Typ. | Gain Flatness ±dB Max. 0/50C | Noise Figure dB Typ. | Power Output At 1dB Comp. dBm Typ. | SWR In/Out Typ. | D.C. Volts mA Typ. | |
|---|---------------------|---|------------------------------|----------------------|------------------------------------|-----------------|--------------------|----|
| <i>Discrete Devices - Models listed by model number</i> | | | | | | | | |
| CTS6001 | DC-5.5 | 15 | N/A | 4.0 | 13.5 | 2.0/2.0 | 4 | 45 |
| CTS6002 (SiGe RF Transistor) | 2.0-20.0 | 21/10 (21dB @ 2 GHz, 10 dB @ 6 GHz) | N/A | 1.0 | N/A | N/A | 3 | 30 |

| Model | Frequency Response (Mhz) Min. | Gain Over 0° to 50° C (dB) Min. | Gain Over -55° to 85° C (dB) Min. | Noise Figure (dB) Typical | Power Output at 1 dB Gain Comp (dBm) Typical | Gain Flatness (±dB) Typical | 3rd Order Intercept (dBm) Typical | Input Power (±1% Reg.) Voltage (VDC) Typical | Current (mA) Typical |
|--|-------------------------------|---------------------------------|-----------------------------------|---------------------------|--|-----------------------------|-----------------------------------|--|----------------------|
| <i>GPD Series TO-39 Package - Typical Specifications at 25°C - Models listed by Model Number</i> | | | | | | | | | |
| GPD-110 | 0.1-400 | — | 12 | 4.0 | -2.0 | 1.0 | 12 | 2.5 | 10 |
| GPD-120 | 0.1-400 | — | 13 | 5.5 | 8.0 | 1.0 | 24 | 5.5 | 25 |
| GPD-130 | 0.1-400 | — | 12 | 7.0 | 17.0 | 1.0 | 27 | 6.0 | 60 |
| GPD-311 | 0.1-1000 | 12 | 11 | 4.5 | 3.0 | 1.0 | 15 | 2.7 | 15 |
| GPD-321 | 0.1-1000 | 12 | 11 | 4.7 | 8.0 | 1.0 | 20 | 3.5 | 25 |
| GPD-320 | 0.1-1000 | 8 | 7 | 5.0 | 8.0 | 1.0 | 18 | 3.0 | 25 |
| GPD-331 | 0.1-1000 | 10 | 9 | 6.0 | 16.0 | 1.0 | 28 | 5.5 | 60 |
| GPD-410 | 0.1-1500 | 12 | 11 | 4.2 | 2.5 | 1.0 | 15 | 2.5 | 15 |
| GPD-420 | 0.1-1500 | 11 | 10 | 4.7 | 8.0 | 1.0 | 20 | 2.8 | 25 |
| GPD-430 | 0.1-1500 | 10 | 9 | 6.3 | 16.0 | 1.0 | 28 | 5.0 | 60 |
| <i>GPD/GPM Series TO-12 Package - Guaranteed Specifications at 0 to 50°C Case Temperature</i> | | | | | | | | | |
| <i>Typical Values at 25°C - Models listed by Frequency, then by Model Number</i> | | | | | | | | | |
| GPD-201 | 5-200 | 30 | 26 | 3.0 | 5.0 | 1.0 | 13 | 15.0 | 30 |
| GPD-202 | 5-200 | 25 | 23 | 5.5 | 11.0 | 1.0 | 18 | 15.0 | 60 |
| GPD-251 | 5-200 | 25 | 23 | 4.0 | 1.0 | 1.0 | 10 | 5.0 | 30 |
| GPD-401 | 5-400 | 13 | 12 | 4.0 | -2.0 | 1.0 | 9 | 15.0 | 10 |
| GPD-402 | 5-400 | 13 | 12 | 8.0 | 8.0 | 1.0 | 18 | 15.0 | 24 |
| GPD-403 | 5-400 | 9 | 8 | 7.5 | 16.0 | 1.0 | 25 | 24.0 | 65 |
| GPD-404 | 5-400 | 9 | 8 | 7.5 | 17.0 | 1.0 | 26 | 15.0 | 70 |
| GPD-461 | 5-400 | 13 | 12 | 4.0 | -2.0 | 1.0 | 9 | 15.0 | 10 |
| GPD-462 | 5-400 | 13 | 12 | 8.0 | 8.0 | 1.0 | 18 | 15.0 | 24 |
| GPD-463 | 5-400 | 9 | 8 | 7.5 | 16.0 | 1.0 | 25 | 24.0 | 65 |
| GPD-464 | 5-400 | 9 | 8 | 7.5 | 17.0 | 1.0 | 26 | 15.0 | 70 |
| GPD-405 | 10-400 | 13 | 12 | 6.5 | 23.0 | 1.0 | 36 | 15.0 | 90 |
| GPD-1001 | 5-1000 | 12 | 11 | 6.0 | 0.0 | 1.0 | 12 | 15.0 | 15 |
| GPD-1003 | 5-1000 | 10 | 9 | 7.0 | 14.0 | 1.0 | 25 | 15.0 | 55 |
| GPD-1061 | 5-1000 | 12 | 11 | 6.0 | 0.0 | 1.0 | 12 | 15.0 | 15 |
| GPD-1063 | 5-1000 | 10 | 9 | 7.0 | 14.0 | 1.0 | 25 | 15.0 | 55 |

Current data sheets available on website. Shaded models indicate typical output power ≥+20 dBm.

High Performance 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 | | | | | | | | | | | | | | | | | | |
| 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 |
| 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 | 40/53 | 1.8 | 2.0 | 15 | 500 |
| 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 | 19.2 | 17.5 | 16.5 | 0.7 | 0.8 | 5.0 | 7.0 | 7.5 | 29.5 | 29.0 | 28.5 | 37 | 40/55 | 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 | 42.0 | 38.0 | 36.0 | 0.9 | 1.2 | 3.1 | 3.7 | 4.2 | 23.5 | 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 | 22.0 | 20.0 | 18.5 | 0.9 | 1.0 | 3.3 | 3.8 | 4.3 | 27.0 | 25.5 | 25.0 | 37 | 39/47 | 1.9 | 2.0 | 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 | 10-2500 | 19.0 | 18.0 | 17.0 | 0.8 | 0.9 | 4.7 | 5.2 | 5.7 | 27.5 | 26.0 | (25.5) | 35 | 37/52 | 1.9 | 2.0 | 15 | 285 |
| A2P2520 | 100-2500 | 36.0 | 33.0 | 32.0 | 1.0 | 1.2 | 3.5 | 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 | 2.0 | 2.5 | 3.8 | 4.0 | 4.5 | 25.5 | 24.5 | 24.0 | 52 | 39/52 | 2.2 | 2.3 | 15 | 301 |
| 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 | 28.5 | 26.5 | 24.0 | 0.8 | 1.0 | 3.5 | 4.5 | 5.0 | 27.0 | 26.0 | 25.5 | 50 | 36/42 | 1.9 | 2.0 | 15 | 355 |
| 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 |
| 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 | 2.5 | 3.5 | 4.0 | 27.0 | 25.0 | 24.5 | 36 | 39/45 | 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 |
| A5P8250 | 2000-8000 | 40.0 | 40.0 | 40.0 | 0.5 | 1.0 | 4.4 | 4.5 | 4.7 | 29.0 | 29.0 | 29.0 | 55 | 42/58 | 1.9 | 2.0 | 15 | 680 |

| Model | Frequency Range MHz | Small Signal Gain dB | | Gain Flatness ±dB | Noise Figure dB | Power Output dBm | Intercept Point dBm | SWR In/Out | D.C. | |
|--|---------------------|----------------------|------------|-------------------|-----------------|------------------|---------------------|------------|------------|------------|
| | | Typ. | Min. 0/50C | | | | | | Max. 0/50C | Max. 0/50C |
| UTC Models listed by Model Number | | | | | | | | | | |
| UTC5-200-X | 10-500 | 26.5 | 25.0 | 1.5 | 2.7 | 6.0 | 22/-- | 2.0 | 15 | 35 |
| UTC5-201-X | 10-500 | 37.0 | 35.0 | 1.5 | 2.7 | 7.0 | 22/-- | 2.0 | 15 | 33 |
| UTC5-202-X | 10-500 | 51.5 | 48.0 | 1.5 | 2.7 | 6.0 | 18/-- | 2.0 | 15 | 60 |
| UTC5-203-X | 10-500 | 64.5 | 62.0 | 2.0 | 2.7 | 6.0 | 18/-- | 2.0 | 15 | 70 |
| UTC5-210-X | 10-500 | 27.5 | 26.0 | 1.5 | 3.0 | 14.0 | 30/-- | 2.0 | 15 | 78 |
| UTC5-211-X | 10-500 | 38.0 | 36.0 | 1.5 | 3.5 | 14.0 | 30/-- | 2.0 | 15 | 76 |
| UTC5-212-X | 10-500 | 47.0 | 45.0 | 1.5 | 2.7 | 14.0 | 27/-- | 2.0 | 15 | 80 |
| UTC5-213-X | 10-500 | 54.0 | 52.0 | 2.0 | 2.7 | 14.0 | 27/-- | 2.0 | 15 | 92 |
| UTC5-214-X | 10-500 | 67.0 | 65.0 | 2.0 | 2.7 | 14.0 | 29/-- | 2.0 | 15 | 103 |
| UTC5-220-X | 10-500 | 24.5 | 23.0 | 1.5 | 3.5 | 22.5 | 30/-- | 2.0 | 15 | 165 |
| UTC5-221-X | 10-500 | 35.0 | 33.0 | 2.0 | 3.0 | 22.5 | 30/-- | 2.0 | 15 | 190 |
| UTC5-222-X | 10-500 | 46.0 | 44.0 | 2.0 | 3.0 | 22.5 | 30/-- | 2.0 | 15 | 193 |
| UTC5-223-X | 10-500 | 60.5 | 58.0 | 2.0 | 3.0 | 22.5 | 30/-- | 2.0 | 15 | 210 |

Current data sheets available on website. Shaded models indicate typical output power ≥+20 dBm. () Indicates maximum temperature of +71°C.

High Performance Amplifiers

Typical and Guaranteed Specifications—50 Ω System

| Model | Frequency Range MHz | Small Signal Gain dB | | Gain Flatness ±dB | Noise Figure dB | Power Output dBm | | Intercept Point dBm | SWR In/Out | D.C. | |
|--|---------------------|----------------------|------------|-------------------|-----------------|------------------|------------|---------------------|------------|------------|---------|
| | | Typ. | Min. 0/50C | Max. 0/50C | Max. 0/50C | Min. 0/50C | Max. 0/50C | 3rd/2nd Typ. | Max. 0/50C | Volts Nom. | mA Typ. |
| UTC Models listed by Model Number | | | | | | | | | | | |
| UTC10-210-X | 10-1000 | 21.5 | 20.0 | 2.0 | 4.5 | 11.0 | 28/-- | 2.0 | 15 | 60 | |
| UTC10-211-X | 10-1000 | 31.0 | 29.0 | 1.5 | 3.7 | 9.0 | 20/-- | 2.0 | 15 | 37 | |
| UTC10-212-X | 10-1000 | 41.0 | 39.0 | 2.0 | 3.7 | 9.0 | 20/-- | 2.0 | 15 | 62 | |
| UTC10-213-X | 10-1000 | 52.0 | 50.0 | 2.0 | 3.7 | 12.0 | 27/-- | 2.0 | 15 | 101 | |
| UTC10-220-X | 20-1000 | 22.5 | 21.0 | 1.5 | 5.0 | 20.0 | 30/-- | 2.0 | 15 | 125 | |
| UTC10-221-X | 10-1000 | 33.0 | 31.0 | 2.0 | 4.5 | 20.0 | 30/-- | 2.0 | 15 | 150 | |
| UTC10-222-X | 10-1000 | 42.0 | 40.0 | 2.0 | 3.7 | 20.0 | 30/-- | 2.0 | 2 | 155 | |
| UTC10-223-X | 10-1000 | 49.0 | 47.0 | 2.0 | 3.7 | 20.0 | 30/-- | 2.0 | 15 | 163 | |
| UTC20-210-X | 10-2000 | 19.5 | 18.0 | 1.5 | 5.0 | 7.0 | 17/-- | 2.2 | 15 | 41 | |
| UTC20-211-X | 10-2000 | 28.0 | 26.0 | 2.0 | 5.0 | 14.0 | 29/-- | 2.2 | 15 | 91 | |
| UTC20-212-X | 10-2000 | 34.0 | 32.0 | 2.0 | 6.0 | 14.0 | 29/-- | 2.2 | 15 | 104 | |
| UTC20-213-X | 10-2000 | 40.0 | 38.0 | 2.0 | 6.0 | 12.0 | 29/-- | 2.2 | 15 | 126 | |

| Dash No. | Type | RF In | RF Out |
|----------|------|--------|--------|
| -1 | SMA | FEMALE | FEMALE |
| -2 | N | FEMALE | FEMALE |
| -3 | BNC | FEMALE | FEMALE |
| -4 | TNC | FEMALE | FEMALE |

| Dash No. | Type | RF In | RF Out |
|----------|-------|--------|--------|
| -5 | SMA | MALE | MALE |
| -6 | SMA | MALE | FEMALE |
| -7 | SMA | FEMALE | MALE |
| -8 | SMA/N | FEMALE | FEMALE |

Standard Hi-Rel Up-Screen Devices

| Model P/N | Basic P/N | Comparable Hi-Rel Parts | Product Type | Max Frequency | Package Type |
|---|-----------|-------------------------|------------------------------|---------------|--------------|
| Ceramic Packaged Up-screened Devices | | | | | |
| PHT-64020B | AT-64020 | HRT-64020TX | LINEAR POWER TRANSISTOR | 6.0 GHz | 200 Mil BeO |
| PHT-64023B | AT-64023 | HRT-64023TX | LINEAR POWER TRANSISTOR | 4.0 GHz | 230 Mil BeO |
| PHT-41470B | AT-41470 | HRT-41470TX | LOW NOISE BIPOLAR TRANSISTOR | 6.0 GHz | 70 Mil |
| PHT-41435B | AT-41435 | HRT-41435TX | LOW NOISE BIPOLAR TRANSISTOR | 6.0 GHz | 35 Micro X |
| PHA-0270B | MSA-0270 | HRMA-0270 | CASCADABLE MMIC AMPLIFIER | 3.0 GHz | 70 Mil |
| PHA-0370B | MSA-0370 | HRMA-0370 | CASCADABLE MMIC AMPLIFIER | 3.0 GHz | 70 Mil |
| PHA-0670B | MSA-0670 | HRMA-0670 | CASCADABLE MMIC AMPLIFIER | 3.0 GHz | 70 Mil |
| PHA-0770B | MSA-0770 | HRMA-0770 | CASCADABLE MMIC AMPLIFIER | 3.0 GHz | 70 Mil |
| PHA-0870B | MSA-0870 | HRMA-1110 | CASCADABLE MMIC AMPLIFIER | 3.0 GHz | 100 Mil |
| PHA-1110B | MSA-1110 | HRMA-0370 | CASCADABLE MMIC AMPLIFIER | 3.0 GHz | 70 Mil |
| PHA-0420B | MSA-0420 | HRMA-0420 | CASCADABLE MMIC AMPLIFIER | 3.0 GHz | 200 Mil BeO |
| PHA-02170B | INA-02170 | HRNA-02170 | CASCADABLE MMIC AMPLIFIER | 3.0 GHz | 70 Mil |

NOTES:

- Individual datasheets are available online.
- Although Teledyne Cougar parts meet the intent of comparable part number's screening, they are not considered direct replacements.
- Teledyne Cougar part numbers have standardized 100% screening and Group A Testing.
- Teledyne Cougar purchases standard Hewlett Packard devices and upscreens per Teledyne Cougar process flows. Prefixes MSA, HRT, AT, INA, HRMA and HRNA are registered trademarks of the Hewlett Packard Company.
- Each device is subjected to a standardized screening flow. Teledyne Cougar uses the appropriate method of MIL-STD-750 & MIL-STD-883 to set the duration and limits of the test procedure.

Current data sheets available on website. Shaded models indicate typical output power $\geq +20$ dBm.



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