

GaN on Diamond



5G Infrastructure



# P R O D U C T S E L E C T I O N G U I D E

Ver. 01



Active Array



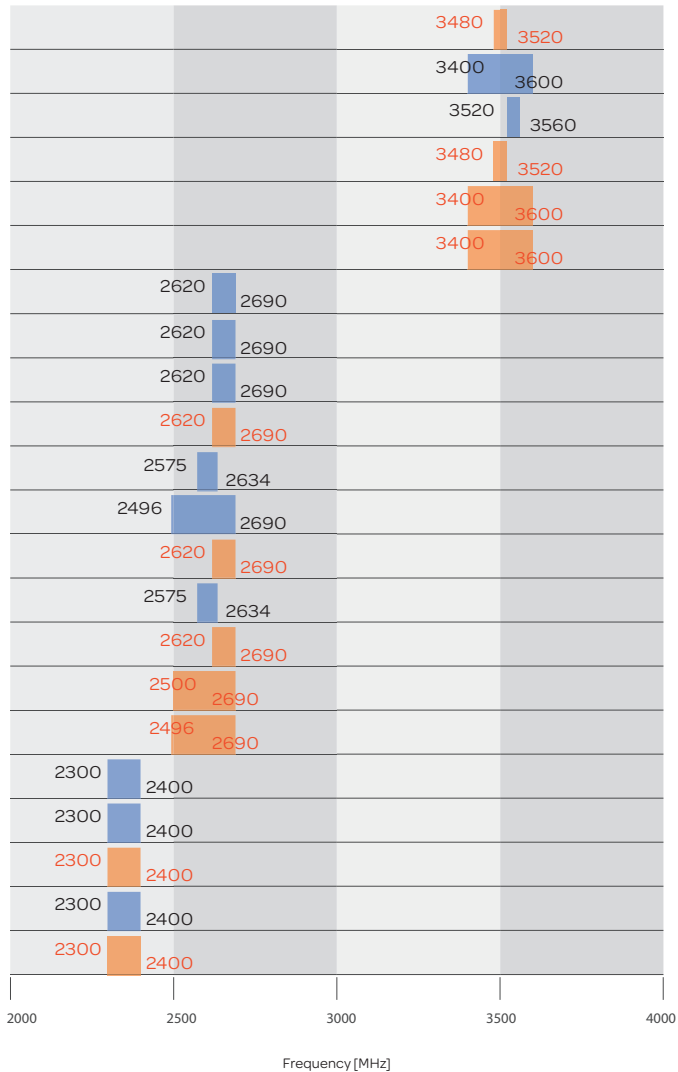
New Source of Light

2017-2018



S = Single Package D = Dual Package

Base Station

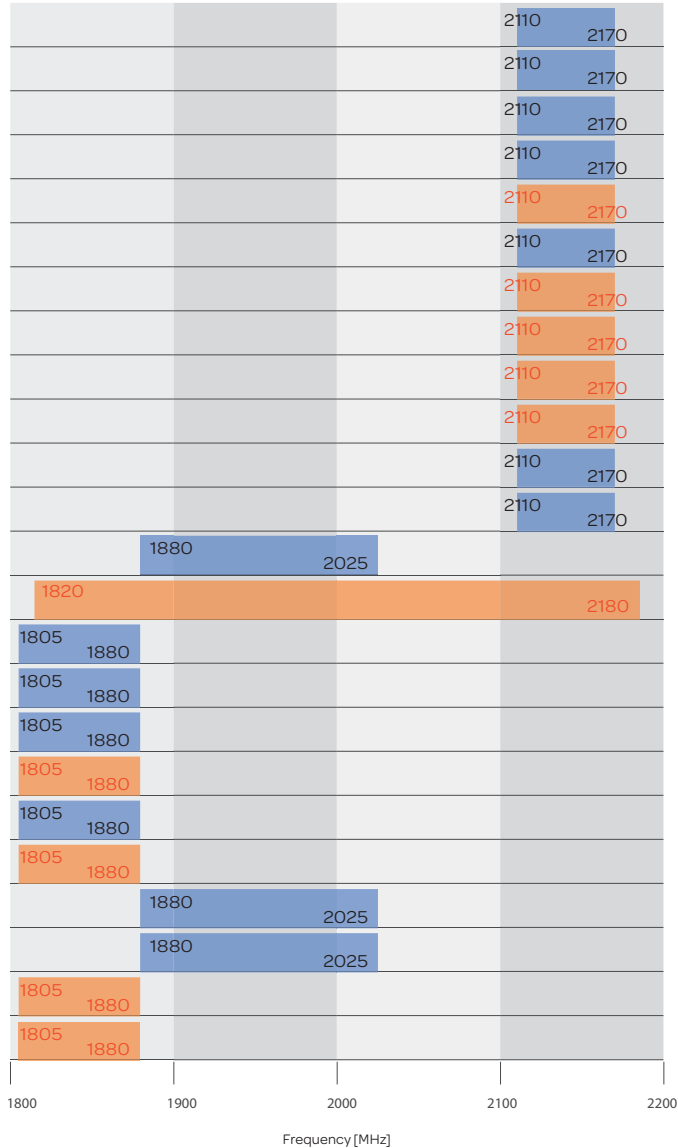


| Band      | Part Number | Type     | Freq. (MHz) |       | Voltage | Output Power         |                     | Gain                 | Eff.@Pavg | ACPR  | Package     |
|-----------|-------------|----------|-------------|-------|---------|----------------------|---------------------|----------------------|-----------|-------|-------------|
|           |             |          | [Min]       | [Max] | [Vds]   | [W <sub>PEAK</sub> ] | [W <sub>AVG</sub> ] | [dB <sub>AVG</sub> ] | [%]       | [dBc] |             |
| 3500      | IE36220W    | S        | 3480        | 3520  | 48      | 220                  | 50                  | 14.7                 | 34.8      | 29.6  | RF12002KR3  |
|           | IE36195WD   | D        | 3400        | 3600  | 48      | 195                  | 32                  | 14.0                 | 45.3      | 26.1  | RF12001DKR3 |
|           | IE36170WD   | D        | 3520        | 3560  | 48      | 170                  | 32                  | 14.6                 | 48.3      | 24.6  | RF12001DKR3 |
|           | IE36165W    | S        | 3480        | 3520  | 48      | 165                  | 37                  | 15.3                 | 35.8      | 27.3  | RF12002KR3  |
|           | IE36110W    | S        | 3400        | 3600  | 48      | 110                  | 25                  | 17.1                 | 35.5      | 27.3  | RF12001KR3  |
|           | IE36085W    | S        | 3400        | 3600  | 48      | 85                   | 19                  | 17.3                 | 35.4      | 30.2  | RF12002KR3  |
| 2600      | ID27420D    | D        | 2620        | 2690  | 50      | 420                  | 75                  | 14                   | 54        | 23.5  | RF24001DKR3 |
|           | IE27385D    | D        | 2620        | 2690  | 48      | 385                  | 69                  | 13.8                 | 53.6      | 23.7  | RF24001DKR3 |
|           | IE27330D    | D        | 2620        | 2690  | 48      | 330                  | 63                  | 14.2                 | 54.1      | 22.5  | RF24001DKR3 |
|           | IE27330P    | S        | 2620        | 2690  | 48      | 330                  | 79                  | 15.4                 | 39.1      | 29.2  | NS-AS01     |
|           | IE27275D    | D        | 2575        | 2635  | 48      | 275                  | 50                  | 14.1                 | 59.4      | 21.5  | RF24001DKR3 |
|           | ID26275WD   | D        | 2496        | 2690  | 48      | 275                  | 40                  | 14.4                 | 50.5      | 26.6  | RF18001DKR3 |
|           | IE27220PE   | S        | 2620        | 2690  | 48      | 220                  | 50                  | 17.0                 | 41.5      | 27.0  | NS-AS01     |
|           | IE26195WD   | D        | 2575        | 2635  | 48      | 195                  | 32                  | 14.4                 | 53.6      | 26.3  | RF12001DKR3 |
|           | IE27165PE   | S        | 2620        | 2690  | 48      | 165                  | 40                  | 16.9                 | 43.1      | 28.9  | NS-AS01     |
|           | IE26110P    | S        | 2500        | 2690  | 48      | 110                  | 25                  | 19.1                 | 39.6      | 27.7  | NS-AS01     |
|           | IE26085P    | S        | 2496        | 2690  | 48      | 85                   | 19                  | 20.2                 | 42.0      | 26.2  | NS-AS01     |
|           | 2300        | IE23385D | D           | 2300  | 2400    | 48                   | 385                 | 63                   | 14.5      | 55.1  | 24.6        |
| IE23330D  |             | D        | 2300        | 2400  | 48      | 330                  | 63                  | 14.6                 | 54.2      | 23.4  | RF24001DKR3 |
| IR23220P  |             | S        | 2300        | 2400  | 48      | 220                  | 50                  | 16.1                 | 42.1      | 28.4  | NS-AS01     |
| IE23195WD |             | D        | 2300        | 2400  | 48      | 195                  | 32                  | 15.3                 | 55.8      | 25.6  | RF12001DKR3 |
| IR23110P  |             | S        | 2300        | 2400  | 48      | 110                  | 25                  | 18.2                 | 41.0      | 30.0  | NS-AS01     |



S = Single Package D = Dual Package

## Base Station

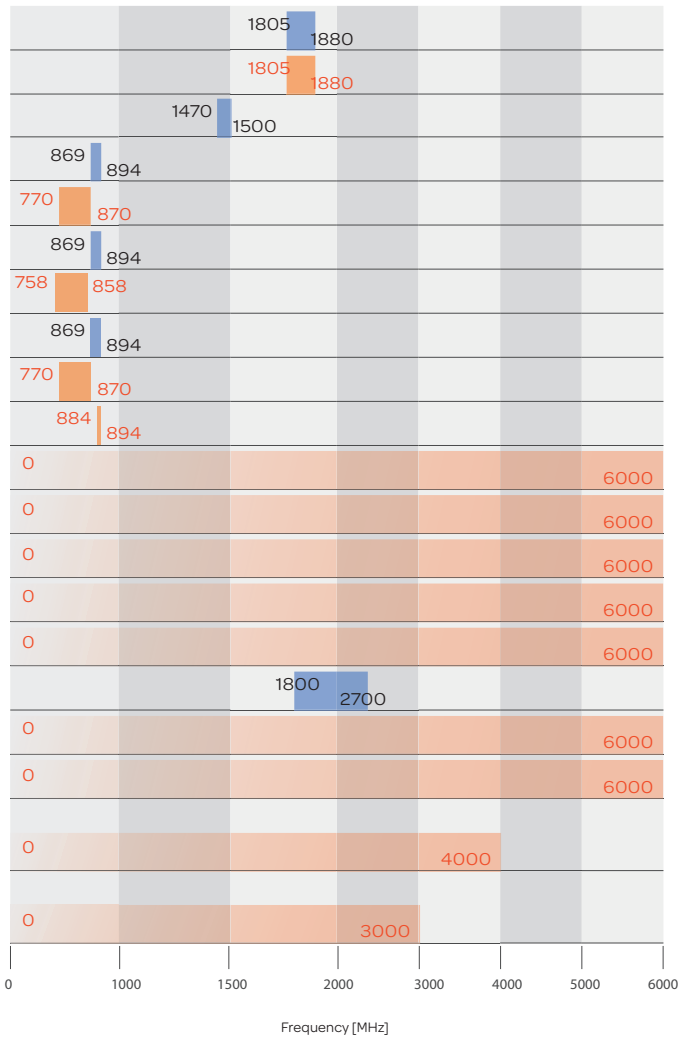


| Band | Part Number | Type      | Freq. (MHz) |       | Voltage [Vds] | Output Power         |                     | Gain [dB <sub>AVG</sub> ] | Eff.@Pavg [%] | ACPR [dBc] | Package     |             |
|------|-------------|-----------|-------------|-------|---------------|----------------------|---------------------|---------------------------|---------------|------------|-------------|-------------|
|      |             |           | [Min]       | [Max] |               | [W <sub>PEAK</sub> ] | [W <sub>AVG</sub> ] |                           |               |            |             |             |
| 2100 | ID21480D    | D         | 2110        | 2170  | 50            | 480                  | 85                  | 14.9                      | 54.8          | 27         | RF24001DKR3 |             |
|      | ID21440D    | D         | 2110        | 2170  | 48            | 440                  | 79                  | 14.7                      | 54.1          | 27.3       | RF24001DKR3 |             |
|      | IE21385D    | D         | 2110        | 2170  | 48            | 385                  | 63                  | 14.6                      | 55.7          | 25.5       | RF24001DKR3 |             |
|      | IE21330D    | D         | 2110        | 2170  | 48            | 330                  | 63                  | 14.8                      | 55.7          | 29.4       | RF24001DKR3 |             |
|      | IE21330P    | S         | 2110        | 2170  | 48            | 330                  | 79                  | 15.6                      | 39.2          | 30.2       | NS-AS01     |             |
|      | IE21250D    | D         | 2110        | 2170  | 48            | 250                  | 45                  | 15.7                      | 57.1          | 26.5       | RF24001DKR3 |             |
|      | IE21220P    | S         | 2110        | 2170  | 48            | 220                  | 50                  | 17.4                      | 40.0          | 30.8       | NS-AS01     |             |
|      | IE21165PE   | S         | 2110        | 2170  | 48            | 165                  | 37                  | 17.5                      | 39.6          | 31.9       | NS-AS01     |             |
|      | IE21110P    | S         | 2110        | 2170  | 48            | 110                  | 25                  | 18.4                      | 38.9          | 32.7       | NS-AS01     |             |
|      | IE21085P    | S         | 2110        | 2170  | 48            | 85                   | 19                  | 20.7                      | 43.1          | 26.6       | NS-AS01     |             |
|      | IE21083WD   | D         | 2110        | 2170  | 48            | 83                   | 15                  | 16.2                      | 57.1          | 30.3       | RF12001DKR3 |             |
|      | IE21056WD   | D         | 2110        | 2170  | 48            | 56                   | 10                  | 17.2                      | 54.8          | 25.3       | RF12001DKR3 |             |
|      | 2000        | ID20275WD | D           | 1880  | 2025          | 48                   | 275                 | 38                        | 15.0          | 51.0       | 28.4        | RF18001DKR3 |
|      |             | IE20220WV | S           | 1820  | 2180          | 48                   | 220                 | 50                        | 16.6          | 38.2       | 24.6        | RF12001KR3  |
| 1800 | ID18440D    | D         | 1805        | 1880  | 48            | 440                  | 79                  | 14.6                      | 54.5          | 27.6       | RF24001DKR3 |             |
|      | IE18385D    | D         | 1805        | 1880  | 48            | 385                  | 63                  | 15.1                      | 56.2          | 25.8       | RF24001DKR3 |             |
|      | IE18330D    | D         | 1805        | 1880  | 48            | 330                  | 63                  | 15.5                      | 57.7          | 25.2       | RF24001DKR3 |             |
|      | IE18330PG   | S         | 1805        | 1880  | 48            | 330                  | 74                  | 15.8                      | 40.0          | 31.9       | NS-AS01     |             |
|      | IE18250D    | D         | 1805        | 1880  | 48            | 250                  | 45                  | 16.7                      | 58.2          | 26.7       | RF24001DKR3 |             |
|      | IE18220PG   | S         | 1805        | 1880  | 48            | 220                  | 50                  | 18.1                      | 40.9          | 30.3       | NS-AS01     |             |
|      | IE19195WD   | D         | 1880        | 2025  | 48            | 195                  | 32                  | 16.9                      | 49.9          | 27.8       | RF12001DKR3 |             |
|      | IE19170WD   | D         | 1880        | 2025  | 48            | 170                  | 30                  | 17.0                      | 48.9          | 25.6       | RF12001DKR3 |             |
|      | IE18165P    | S         | 1805        | 1880  | 48            | 165                  | 37                  | 18.3                      | 39.2          | 31.0       | NS-AS01     |             |
|      | IE18110P    | S         | 1805        | 1880  | 48            | 110                  | 25                  | 18.9                      | 38.2          | 29.2       | NS-AS01     |             |

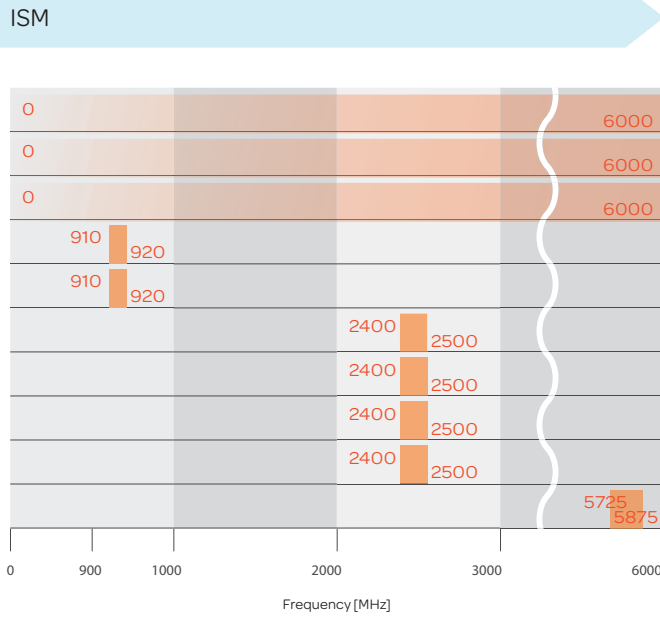


S = Single Package D = Dual Package

Base Station



| Band             | Part Number     | Type | Freq. (MHz) |       | Voltage | Output Power         |                     | Gain                 | Eff.@Pavg | ACPR  | Package                 |
|------------------|-----------------|------|-------------|-------|---------|----------------------|---------------------|----------------------|-----------|-------|-------------------------|
|                  |                 |      | [Min]       | [Max] | [Vds]   | [W <sub>PEAK</sub> ] | [W <sub>AVG</sub> ] | [dB <sub>AVG</sub> ] | [%]       | [dBc] |                         |
| 1800             | IE18110WD       | D    | 1805        | 1880  | 48      | 110                  | 25                  | 15.4                 | 54.8      | 28.5  | RF12001DKR3             |
|                  | IE18085P        | S    | 1805        | 1880  | 48      | 85                   | 19                  | 18.9                 | 36.6      | 31.5  | RF12002KR3              |
| 1500             | IE15275D        | D    | 1470        | 1500  | 48      | 275                  | 50                  | 17.0                 | 58.0      | 26.5  | RF24001DKR3             |
| 800              | IE08330D        | D    | 869         | 894   | 48      | 330                  | 63                  | 20.5                 | 57.9      | 26.4  | RF24001DKR3             |
|                  | IRO8330P        | S    | 770         | 870   | 48      | 330                  | 79                  | 21.0                 | 41.6      | 30.6  | NS-AS01                 |
|                  | IE08220WD       | D    | 869         | 894   | 48      | 220                  | 35                  | 20.7                 | 57.9      | 25.7  | RF12001DKR3             |
|                  | IE08220P        | S    | 758         | 858   | 48      | 220                  | 50                  | 22.0                 | 38.9      | 29.4  | NS-AS01                 |
|                  | IE08195WD       | D    | 869         | 894   | 48      | 195                  | 32                  | 20.6                 | 61.8      | 27.4  | RF12001DKR3             |
|                  | IE08165P        | S    | 770         | 900   | 48      | 165                  | 37                  | 20.9                 | 39.8      | 33.3  | NS-AS01                 |
|                  | ET13110P        | S    | 884         | 894   | 48      | 110                  | 25                  | 21.8                 | 39.4      | 29.9  | NS-BS01                 |
| Driver<br>0-6000 | RT12014P        | S    | DC          | 6000  | 48      | 14                   | 3.2                 | 17.5@2.6GHz          | 35.2      | 37.3  | NS-CS01                 |
|                  | RT12028P        | S    | DC          | 6000  | 48      | 28                   | 6.3                 | 17.6@2.6GHz          | 29.7      | 37.1  | NS-CS01                 |
|                  | RT12055P        | S    | DC          | 6000  | 48      | 55                   | 12.6                | 15.7@2.6GHz          | 34.1      | 36.5  | NS-CS01                 |
|                  | ETQ2014P        | S    | DC          | 6000  | 48      | 14                   | 3.2                 | 18.5@2.6GHz          | 35.2      | 31.3  | DFN66726L-Q2            |
|                  | ETQ2028P        | S    | DC          | 6000  | 48      | 28                   | 6.3                 | 18.7@2.6GHz          | 33.8      | 33.0  | DFN66726L-Q2            |
|                  | ETQ2028D        | D    | 1800        | 2700  | 48      | 28                   | 2                   | 17.9@1.95GHz         | 31.0      | 28.4  | DFN66726L-Q2            |
|                  | DT12030P        | S    | DC          | 6000  | 50      | 30                   | 6                   | 18.8@2.6GHz          | 40.8      | 30.1  | NS-CS01                 |
|                  | DT12060P        | S    | DC          | 6000  | 50      | 60                   | 13                  | 17.1@2.6GHz          | 38.1      | 31.5  | NS-CS01                 |
|                  | General Purpose |      | S           | DC    | 4000    | 28                   | 45                  | -                    | 14@2.5GHz | 55    | -                       |
| GT14120          |                 | S    | DC          | 3000  | 28      | 120                  | -                   | 15.5@1.3GHz          | 60        | -     | RF06001KR3 & NS-BS01PK2 |

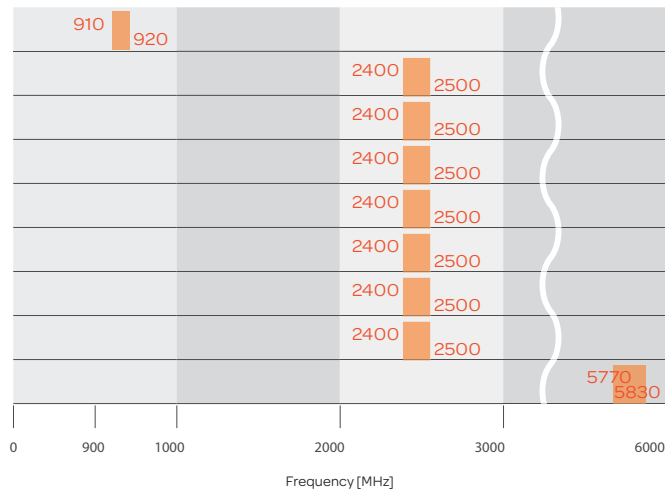


S = Single Package D = Dual Package



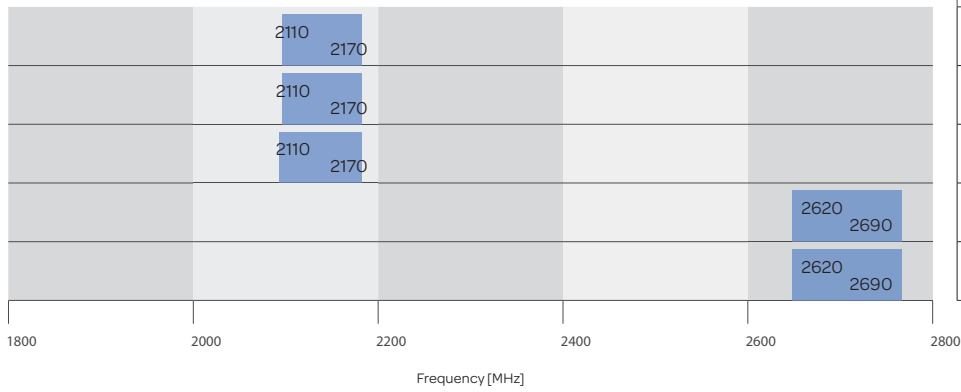
| Band             | Part Number | Type | Freq. (MHz) |       | Voltage | Output Power         | Power Gain           | Eff.@Ppeak | Package    |
|------------------|-------------|------|-------------|-------|---------|----------------------|----------------------|------------|------------|
|                  |             |      | [Min]       | [Max] | [Vds]   | [W <sub>PEAK</sub> ] | [dB <sub>AVG</sub> ] | [%]        |            |
| Driver<br>0-6000 | ET43014P    | S    | DC          | 6000  | 50      | 16                   | 16.5                 | 63.0       | RF01501KR3 |
|                  | ET43028P    | S    | DC          | 6000  | 50      | 32                   | 15.5                 | 64.0       | RF01501KR3 |
|                  | ET43055P    | S    | DC          | 6000  | 50      | 64                   | 14                   | 67.0       | RF01501KR3 |
| 915              | IE09150PC   | S    | 910         | 920   | 50      | 165                  | 20                   | 80         | NS-AS01    |
|                  | IE09300PC   | S    | 910         | 920   | 50      | 330                  | 19                   | 78         | NS-AS01    |
| 2450             | IE24100P    | S    | 2400        | 2500  | 50      | 105                  | 14.5                 | 72         | NS-AS01    |
|                  | IE24150P    | S    | 2400        | 2500  | 50      | 165                  | 13.5                 | 74         | NS-DS01    |
|                  | IE24200P    | S    | 2400        | 2500  | 50      | 220                  | 14                   | 73         | NS-AS01    |
|                  | IE24300P    | S    | 2400        | 2500  | 50      | 320                  | 12.5                 | 70         | NS-DS01    |
| 5825             | IE58110Y    | S    | 5725        | 5875  | 50      | 100                  | 7                    | 45         | NS-DS01    |

ISM



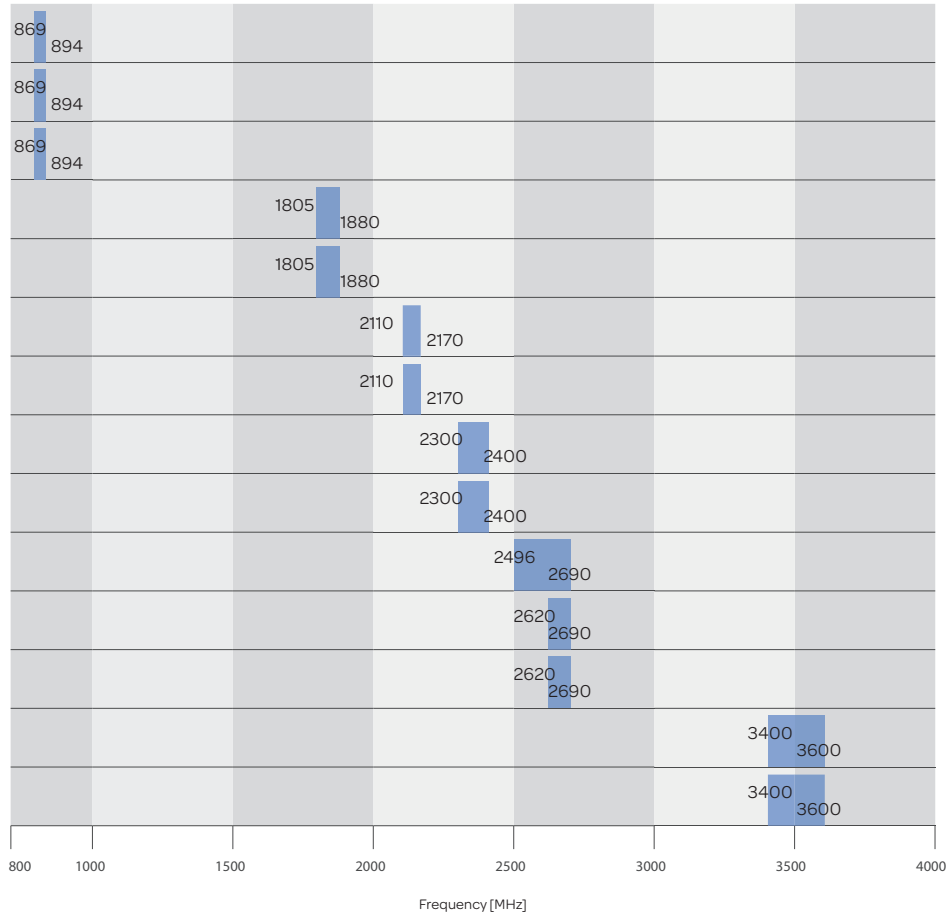
| Part Number  | Freq. (MHz) |       | Voltage | Output Power | Power Gain | Eff. @Ppeak | Dimension   |
|--------------|-------------|-------|---------|--------------|------------|-------------|-------------|
|              | [Min]       | [Max] | [Vds]   | [W]          | [dBPEAK]   | [%]         | [mm]        |
| RNP09550-20  | 910         | 920   | 50      | 550          | 57         | 67          | 240x98x26   |
| RYP24200-20S | 2400        | 2500  | 50      | 200          | 28         | 68          | 70x30x4     |
| RNP24100-20  | 2400        | 2500  | 50      | 100          | 50         | 60          | 160x65x32   |
| RNP24150-20  | 2400        | 2500  | 50      | 150          | 52         | 60          | 160x65x32   |
| RNP24200-20  | 2400        | 2500  | 50      | 200          | 53         | 57          | 160x65x32   |
| RNP24300-20  | 2400        | 2500  | 50      | 300          | 55         | 56          | 180x80x35   |
| RNP24550-20  | 2400        | 2500  | 50      | 550          | 42         | 55          | 240x98x26   |
| RNP24800-20  | 2400        | 2500  | 50      | 800          | 42         | 55          | 285x98x35.2 |
| RNP58100-C1  | 5770        | 5830  | 50      | 100          | 30         | 33          | 150x88x10   |

Base Station



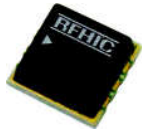
| Part Number | Freq. (MHz) |       | Pout  | Gain                 | Peak Power | Eff. | Dimension  |
|-------------|-------------|-------|-------|----------------------|------------|------|------------|
|             | [Min]       | [Max] | [dBm] | [dB <sub>AVG</sub> ] | [dBm]      | [%]  | [mm]       |
| RTP21030-20 | 2110        | 2170  | 44.8  | 52                   | 52         | 50   | 100X50X20  |
| RTP21052-K2 | 2110        | 2170  | 47.2  | 53                   | 54.7       | 48   | 160X120X20 |
| RTP21074-K2 | 2110        | 2170  | 48.7  | 55                   | 56.2       | 48   | 160X120X20 |
| RTP26052-K2 | 2620        | 2690  | 47.2  | 50                   | 54.7       | 46   | 160X120X20 |
| RTP26074-K2 | 2620        | 2690  | 48.7  | 50                   | 56.2       | 45   | 160X120X20 |

## Base Station



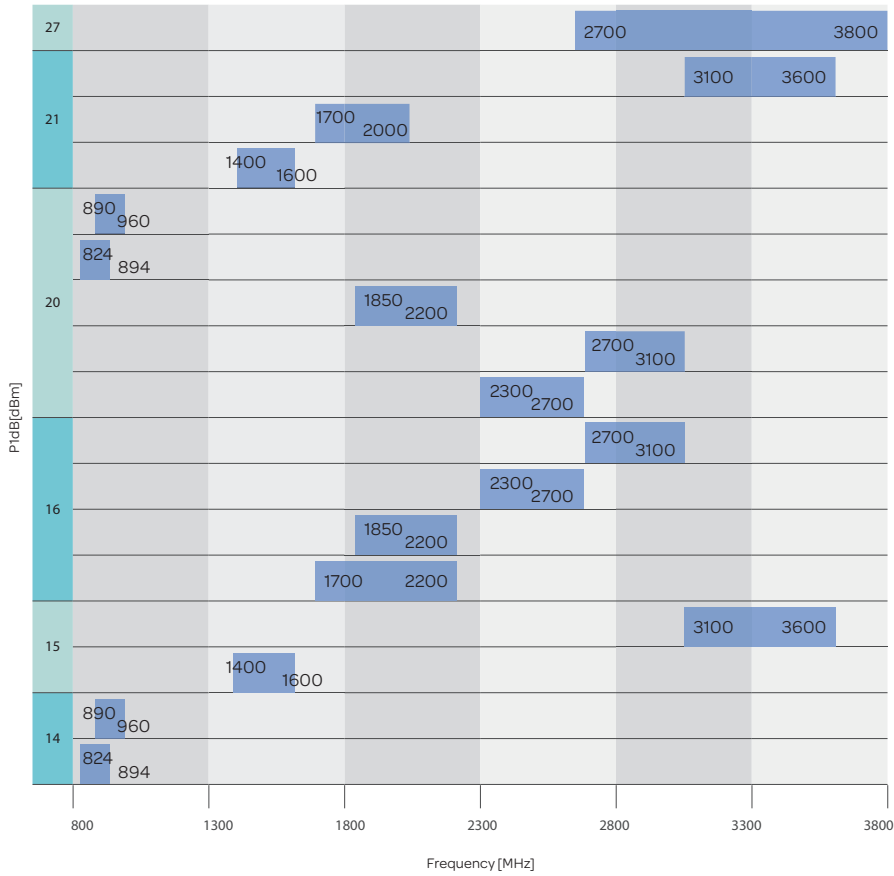
| Part Number | Freq. (MHz) |       | Pout  | Gain                 | Peak Power | Eff. | Dimension |
|-------------|-------------|-------|-------|----------------------|------------|------|-----------|
|             | [Min]       | [Max] | [dBm] | [dB <sub>AVG</sub> ] | [dBm]      | [%]  | [mm]      |
| RD08028-20  | 869         | 894   | 44.5  | 21                   | 53         | 60   | 40X80X20  |
| RD08063-20  | 869         | 894   | 48    | 20.2                 | 55.8       | 57   | 45X75X20  |
| RD08083-20  | 869         | 894   | 49    | 18                   | 56.2       | 56   | 50X98X20  |
| RD18063-20  | 1805        | 1880  | 48    | 15.2                 | 55.2       | 56.2 | 55X95X20  |
| RD18083-20  | 1805        | 1880  | 49.2  | 14.1                 | 56.2       | 57.1 | 60X95X20  |
| RD21063-20  | 2110        | 2170  | 48    | 14.5                 | 55.5       | 55   | 50X85X20  |
| RD21083-20  | 2110        | 2170  | 49.2  | 13.8                 | 57         | 56   | 50X85X20  |
| RD23040-20  | 2300        | 2400  | 46    | 15                   | 53         | 55   | 40X85X20  |
| RD21063-20  | 2300        | 2400  | 48    | 15.8                 | 55.8       | 55   | 59X80X20  |
| RD26035-20  | 2496        | 2690  | 45.4  | 14.5                 | 53.4       | 50   | 30X70X20  |
| RD26063-20  | 2620        | 2690  | 48    | 13.5                 | 55.5       | 55.3 | 50X85X20  |
| RD26083-20  | 2620        | 2690  | 49.2  | 13                   | 57.1       | 53   | 50X85X20  |
| RD36028-20  | 3400        | 3600  | 44.2  | 14                   | 52.4       | 43   | 45X87X20  |
| RD36056-20  | 3400        | 3600  | 47.5  | 13                   | 56         | 41   | 58X94X20  |





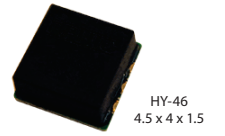
CP-16  
10.2 x 10.2 x 4

Base Station

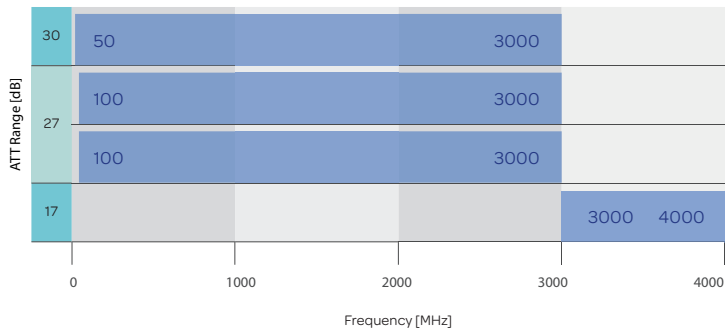


| Part Number | Freq. (MHz) |       | Gain [dB] | NF [dB] | P1dB [dBm] | OIP3 [dBm] | Vdd [V] | Idd [mA] | Package |
|-------------|-------------|-------|-----------|---------|------------|------------|---------|----------|---------|
|             | [Min]       | [Max] |           |         |            |            |         |          |         |
| LCL3322-L   | 2700        | 3800  | 21        | 1.4     | 27         | 39         | 5       | 190-250  | CP-16B  |
| CL3502-L    | 3100        | 3600  | 10.5      | 1       | 21         | 36         | 5       | 100      | CP-16A  |
| CL1802-L    | 1700        | 2000  | 16        | 0.6     | 21         | 33         | 5       | 100      | CP-16A  |
| CL1502-L    | 1400        | 1600  | 17        | 0.6     | 21         | 33         | 5       | 90       | CP-16A  |
| CL0902-L    | 890         | 960   | 20        | 0.7     | 20         | 31         | 5       | 100      | CP-16A  |
| CL0902-L    | 824         | 894   | 20.5      | 0.7     | 20         | 31         | 5       | 100      | CP-16A  |
| CL2102-L    | 1850        | 2200  | 15        | 0.6     | 20         | 33         | 5       | 100      | CP-16A  |
| CL2702-L    | 2700        | 3100  | 11.5      | 0.9     | 20         | 33         | 5       | 100      | CP-16A  |
| CL2702-L    | 2300        | 2700  | 12.5      | 0.9     | 20         | 33         | 5       | 100      | CP-16A  |
| CL2701-L    | 2700        | 3100  | 10.5      | 0.9     | 16         | 28         | 5       | 45       | CP-16A  |
| CL2701-L    | 2300        | 2700  | 12        | 0.9     | 16         | 28         | 5       | 45       | CP-16A  |
| CL2101-L    | 1850        | 2200  | 14        | 0.7     | 16         | 27         | 5       | 45       | CP-16A  |
| CL1801-L    | 1700        | 2200  | 15.5      | 0.6     | 16         | 27         | 5       | 45       | CP-16A  |
| CL3501-L    | 3100        | 3600  | 10        | 1       | 15         | 31         | 5       | 45       | CP-16A  |
| CL1501-L    | 1400        | 1600  | 16        | 0.7     | 15         | 27         | 5       | 45       | CP-16A  |
| CL0901-L    | 890         | 960   | 18        | 0.5     | 14         | 27         | 5       | 65       | CP-16A  |
| CL0901-L    | 824         | 894   | 19        | 0.5     | 14         | 27         | 5       | 65       | CP-16A  |

# Various Attenuators



Base Station

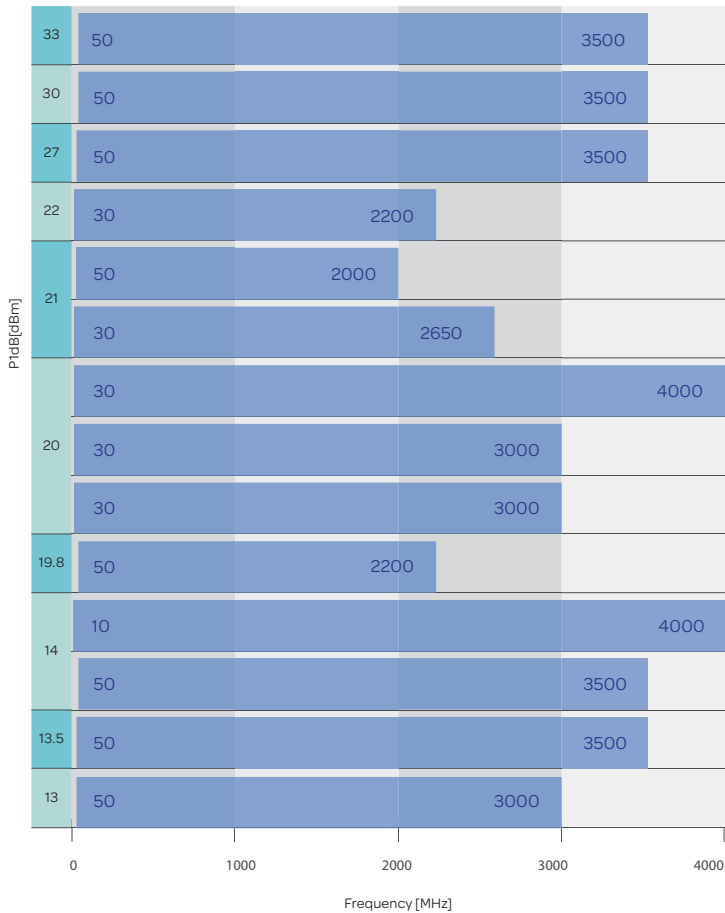


| Part Number | Freq. (MHz) |       | ATT Range | Insertion Loss | Return Loss | Flatness   | Vdd | Vctl  | Idd  | Package |
|-------------|-------------|-------|-----------|----------------|-------------|------------|-----|-------|------|---------|
|             | [Min]       | [Max] | [dB]      | [dB]           | [dB]        | [dBm]      | [V] | [V]   | [mA] |         |
| VA101       | 50          | 3000  | 30@1-2GHz | 3              | -15         | +0.5, -0.5 | 5   | 0-10  | 40   | HY-46   |
| VA102       | 100         | 3000  | 27@1-2GHz | 2              | -15         | +0.5, -0.5 | 3   | 0-12  | 34   | HY-46   |
| VA102       | 100         | 3000  | 27@1-2GHz | 3              | -15         | +0.5, -0.5 | 3   | 0-4.5 | 10   | HY-46   |
| VA103       | 3000        | 4000  | 17@3.5GHz | 2.2            | -16         | +0.5, -0.5 | 3   | 0-10  | 30   | HY-46   |

# M MICs



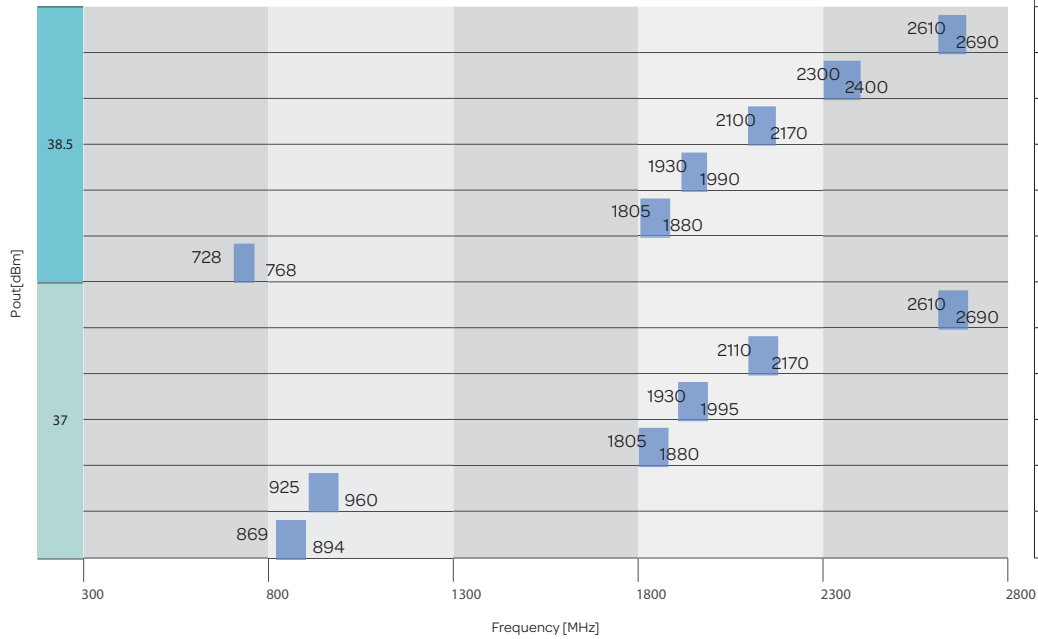
Base Station



| Part Number | Freq. (MHz) |       | Gain | NF   | P1dB  | Eff.@ P1dB | OIP3  | WCDMA | Voltage | Current | Package | Process Type |
|-------------|-------------|-------|------|------|-------|------------|-------|-------|---------|---------|---------|--------------|
|             | [Min]       | [Max] | [dB] | [dB] | [dBm] | [%]        | [dBm] | [dBm] | [V]     | [mA]    |         |              |
| AE379       | 50          | 3500  | 11.5 | 2.3  | 33    | 55         | 43    | 20    | 5       | 390     | SOIC-8  | GaAs E-pHEMT |
| AE368       | 50          | 3500  | 13.7 | 2.9  | 30    | 52         | 48    | 17    | 5       | 300     | SOIC-8  | GaAs E-pHEMT |
| AE367       | 50          | 3500  | 15.5 | 3.5  | 27    | 50         | 39    | 15    | 5       | 140     | SOT-89  | GaAs E-pHEMT |
| AE366       | 30          | 2200  | 22.5 | 1.6  | 22    | -          | 37.5  | 11    | 5       | 100     | SOT-89  | GaAs E-pHEMT |
| AP230       | 50          | 2000  | 17.4 | 3.3  | 21    | -          | 38    | 12    | 5       | 220     | SOIC-8  | GaAs HBT     |
| AE305       | 30          | 2650  | 14.5 | 2.7  | 21    | -          | 38    | 12    | 5       | 110     | SOT-89  | GaAs E-pHEMT |
| AE362       | 30          | 4000  | 15.2 | 1.2  | 20    | -          | 32    | 8.5   | 4.5     | 45      | SOT-89  | GaAs E-pHEMT |
| AE410       | 30          | 3000  | 20   | 2.3  | 20    | -          | 34    | 11    | 5       | 100     | SOT-89  | GaAs E-pHEMT |
| AE314       | 30          | 3000  | 23   | 3    | 20    | -          | 35    | 11    | 5       | 100     | SOT-89  | GaAs E-pHEMT |
| AP112       | 50          | 2200  | 17.6 | 3.4  | 19.8  | -          | 35    | 10    | 5       | 110     | SOT-89  | GaAs HBT     |
| AE608       | 10          | 4000  | 14   | 0.7  | 14    | -          | 32    | -     | 3       | 45      | SOT-143 | GaAs E-pHEMT |
| AP205A      | 50          | 3500  | 14   | 2.3  | 22    | -          | 43    | 13    | 5       | 115     | SOT-89  | GaAs MESFET  |
| AP209       | 50          | 3500  | 13.5 | 2.5  | 24    | -          | 43    | 13    | 9       | 120     | SOT-89  | GaAs MESFET  |
| AP211       | 50          | 3000  | 13   | 2.5  | 24    | -          | 42    | 15    | 5       | 240     | SOIC-8  | GaAs MESFET  |



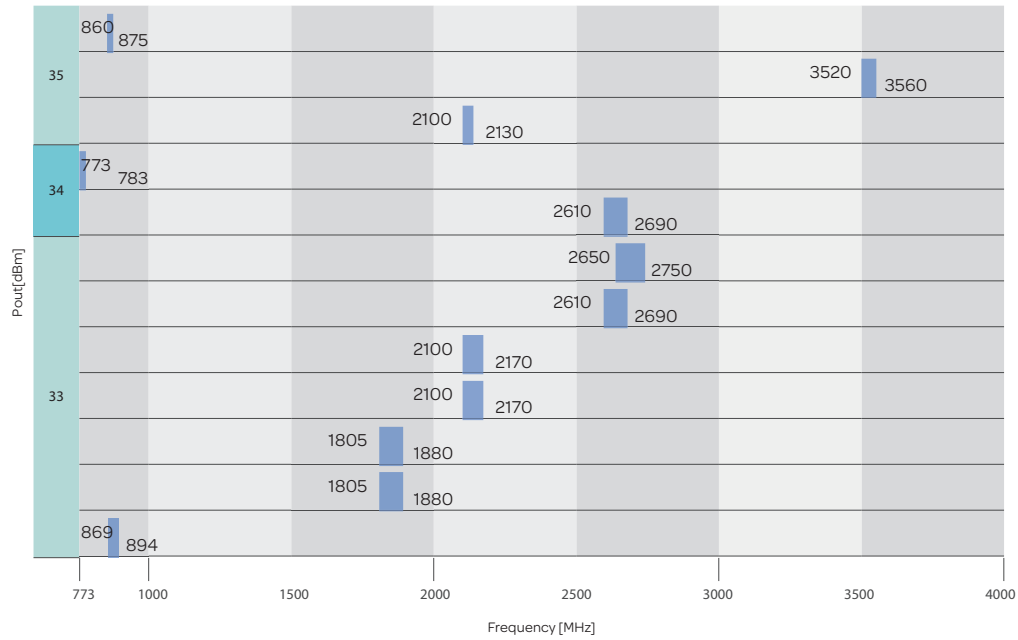
Small Cell



| Part Number | Freq. (MHz) |       | Gain | Pout  | Ppeak | ACLR with DPD | Eff. | Vdd | Idd  | Package |
|-------------|-------------|-------|------|-------|-------|---------------|------|-----|------|---------|
|             | [Min]       | [Max] | [dB] | [dBm] | [dBm] | [dBc]         | [%]  | [V] | [mA] |         |
| RTH26007-10 | 2610        | 2690  | 13   | 38.5  | 46.5  | -53           | 45   | 31  | 500  | NP-8CL  |
| RTH23007-10 | 2300        | 2400  | 14   | 38.5  | 46.5  | -53           | 45   | 31  | 500  | NP-8CL  |
| RTH21007-10 | 2100        | 2170  | 14   | 38.5  | 46.5  | -53           | 45   | 31  | 500  | NP-8CL  |
| RTH20007-10 | 1930        | 1990  | 15   | 38.5  | 46.5  | -53           | 45   | 31  | 500  | NP-8CL  |
| RTH18007-10 | 1805        | 1880  | 16   | 38.5  | 46.5  | -53           | 45   | 31  | 500  | NP-8CL  |
| RTH07007-10 | 728         | 768   | 16   | 38.5  | 46.5  | -53           | 45   | 31  | 500  | NP-8CL  |
| HT2626-30A  | 2610        | 2690  | 30   | 37    | 45    | -54           | 28   | 28  | 630  | NP-1EL  |
| HT2121-30A  | 2110        | 2170  | 36   | 37    | 45    | -53           | 26   | 28  | 680  | NP-1EL  |
| HT1919-30A  | 1930        | 1995  | 38   | 37    | 45    | -53           | 26   | 28  | 670  | NP-1EL  |
| HT1818-30A  | 1805        | 1880  | 38   | 37    | 45    | -52           | 26   | 28  | 680  | NP-1EL  |
| HT0909-30A  | 925         | 960   | 36   | 37    | 45    | -53           | 27   | 28  | 650  | NP-1EL  |
| HT0808-30A  | 869         | 894   | 38   | 37    | 45    | -53           | 28   | 28  | 630  | NP-1EL  |



Small Cell

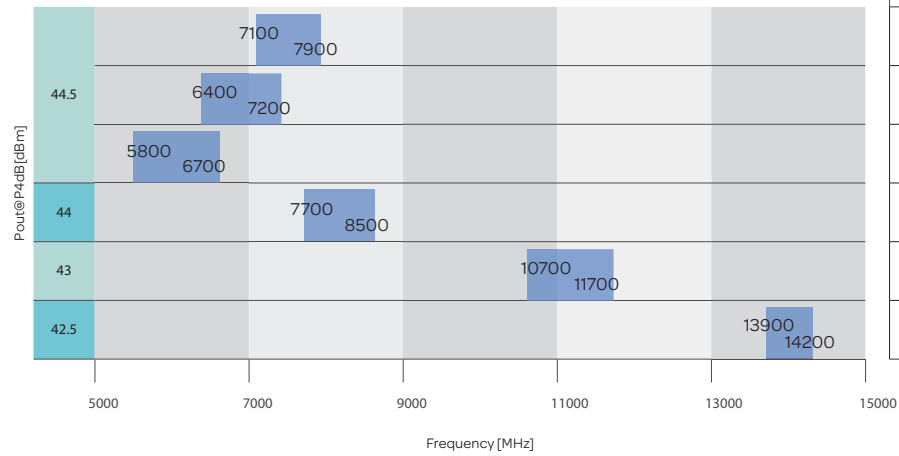


| Part Number  | Freq. (MHz) |       | Gain | Pout  | Ppeak | ACLR with DPD | Eff. | Vdd  | Idd     | Package |
|--------------|-------------|-------|------|-------|-------|---------------|------|------|---------|---------|
|              | [Min]       | [Max] | [dB] | [dBm] | [dBm] | [dBc]         | [%]  | [V]  | [mA]    |         |
| RTH08003-20D | 860         | 875   | 30   | 35.5  | 43    | -53           | 43   | 30   | 260     | SP-1E   |
| RTH35003-20D | 3520        | 3560  | 24   | 35.1  | 42.6  | -53           | 38   | 30   | 280     | SP-1E   |
| RTH21003-20D | 2110        | 2130  | 30   | 35    | 43    | -53           | 40   | 30   | 280     | SP-1E   |
| RTH07003-20D | 773         | 783   | 30   | 34.7  | 42.2  | -53           | 38   | 5/30 | 192/230 | SP-1E   |
| HT2626-15A   | 2610        | 2690  | 30   | 34    | 42    | -54           | 25   | 28   | 360     | NP-1EL  |
| HT2627-15A   | 2650        | 2750  | 27   | 33    | 42    | -52           | 31   | 28   | 450     | NP-1EL  |
| HT2626-15M   | 2610        | 2690  | 30   | 33    | 41.7  | -55           | 25   | 5/28 | 140/260 | NP-1EL  |
| HT2121-15M   | 2110        | 2170  | 32   | 33    | 41.7  | -55           | 26   | 5/28 | 140/250 | NP-1EL  |
| HT2121-15A   | 2110        | 2170  | 33   | 33    | 42    | -54           | 24.5 | 28   | 290     | NP-1EL  |
| HT1818-15M   | 1805        | 1880  | 34   | 33    | 41.5  | -54           | 27   | 5/28 | 140/240 | NP-1EL  |
| HT1818-15A   | 1805        | 1880  | 33   | 33    | 42    | -54           | 25   | 28   | 290     | NP-1EL  |
| HT0808-15A   | 869         | 894   | 37   | 33    | 41.5  | -53           | 26   | 28   | 280     | NP-1EL  |



NP-18L2A  
 15 x 10 x 4.5

Point-to-Point

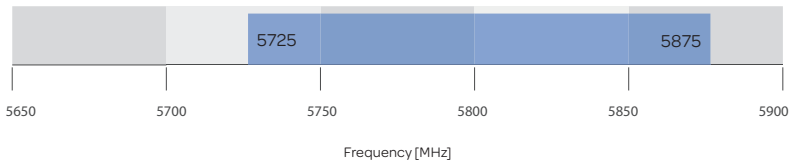


| Part Number  | Freq. (MHz) |       | Gain@P4dB | Pout@P4dB | IM3@S.C.L     | Eff.@P4dB | Vdd | Idd  | Package  |
|--------------|-------------|-------|-----------|-----------|---------------|-----------|-----|------|----------|
|              | [Min]       | [Max] | [dB]      | [dBm]     | [dB]          | [%]       | [V] | [mA] |          |
| HS7179-20A   | 7100        | 7900  | 10.5      | 44.5      | 30@Pout=34dBm | 35        | 40  | 1700 | NP-18L2A |
| HS6472-20A   | 6400        | 7200  | 10.5      | 44.5      | 30@Pout=35dBm | 45        | 40  | 1500 | NP-18L2A |
| HS5867-20A   | 5800        | 6700  | 10.5      | 44.5      | 30@Pout=35dBm | 45        | 40  | 1500 | NP-18L2A |
| HS7785-20A   | 7700        | 8500  | 9         | 44        | 30@Pout=33dBm | 35        | 40  | 1700 | NP-18L2A |
| HS107117-20A | 10700       | 11700 | 8         | 43        | 30@Pout=33dBm | 35        | 40  | 1400 | NP-18L2A |
| HS139142-18A | 13900       | 14200 | 6         | 42.5      | 30@Pout=30dBm | 35        | 40  | 1300 | NP-18L2A |



NP-26  
 20.5 x 15 x 4.8

Wi-Fi

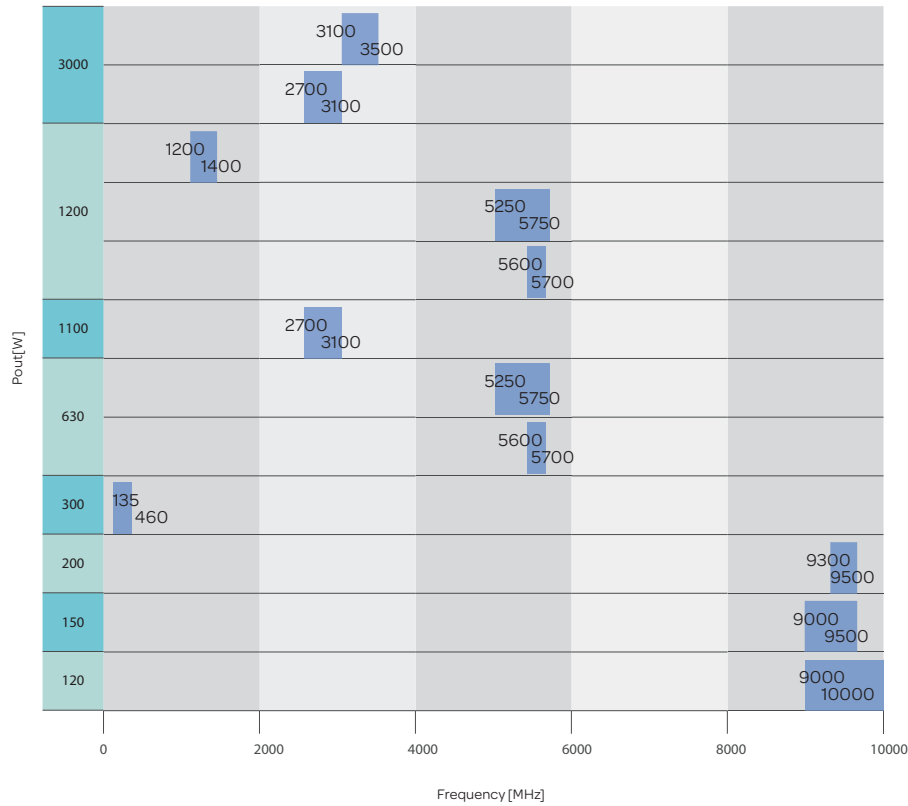


| Part Number | Freq. (MHz) |       | Pave @3% EVM | Psat  | Eff. | Power Gain | Vdd | Idd  | Package |
|-------------|-------------|-------|--------------|-------|------|------------|-----|------|---------|
|             | [Min]       | [Max] | [W]          | [dBm] | [%]  | [dB]       | [V] | [mA] |         |
| HS5758-10A  | 5725        | 5875  | 1.5          | 41    | 45   | 18.5       | 28  | 850  | NP-26   |



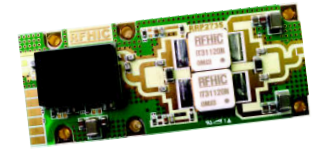
RRP52571K0-41  
190 x 95 x 21

Radar



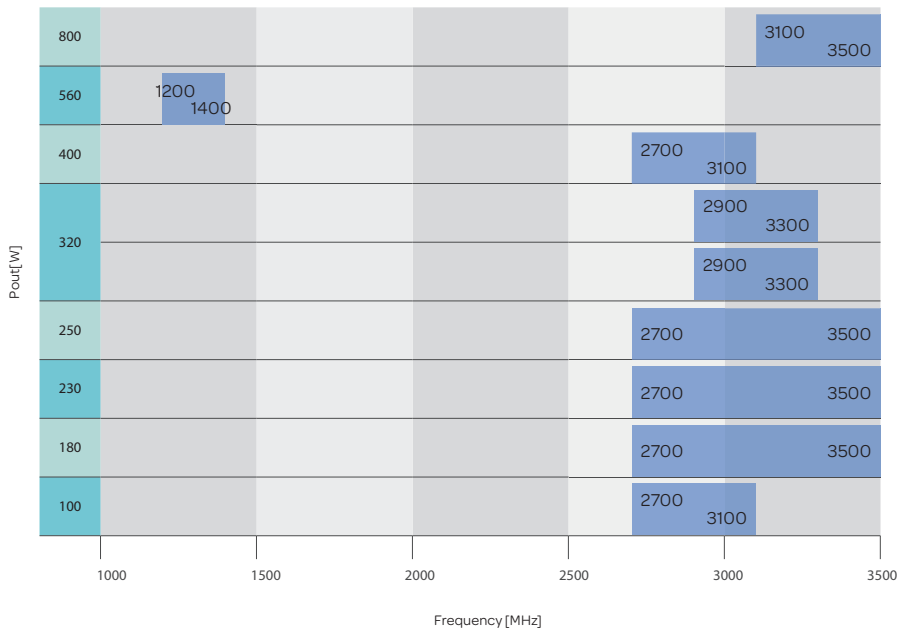
| Part Number     | Freq. (MHz) |       | Gain | Pout | Eff. | Pulse Droop | Duty Ratio | Pulse Width | Vds    | Dimension        |
|-----------------|-------------|-------|------|------|------|-------------|------------|-------------|--------|------------------|
|                 | [Min]       | [Max] | [dB] | [W]  | [%]  | [dB]        | [%]        | [μs]        | [V]    | [mm]             |
| RRP31352K6-20   | 3100        | 3500  | 21   | 3000 | 42   | 0.5         | 5          | 50          | 10/50  | 278.4x165.1x32.3 |
| RRP27312K6-20   | 2700        | 3100  | 21   | 3000 | 42   | 0.5         | 10         | 50          | 10/50  | 278.4x165.1x32.3 |
| RRP131K0-10     | 1200        | 1400  | 54   | 1200 | 50   | 0.5         | 10         | 500         | 12/50  | 250x150x28       |
| RRP52571K0-41   | 5250        | 5750  | 41   | 1200 | 30   | 0.5         | 10         | 100         | 12/50  | 190x95x21        |
| RRP56571K0-41   | 5600        | 5700  | 41   | 1200 | 35   | 0.5         | 10         | 100         | 12/50  | 190x95x22        |
| RRP291K0-10     | 2700        | 3100  | 60.5 | 1100 | 35   | 0.5         | 10         | 500         | 12/50  | 220x145x27       |
| RRP5257550-35   | 5250        | 5750  | 35   | 630  | 30   | 0.5         | 10         | 100         | 12/50  | 163x42.5x14      |
| RRP5657550-35   | 5600        | 5700  | 35   | 630  | 30   | 0.5         | 10         | 100         | 12/50  | 163x42.5x14      |
| RRP03250-10     | 135         | 460   | 31   | 300  | 45   | 0.5         | 20         | 500         | 50     | 114.3x25.4x28    |
| RRM9395200-56   | 9300        | 9500  | 56   | 200  | 20   | 0.5         | 10         | 100         | 5.6/50 | 140x140x25       |
| RRP9095150-18   | 9000        | 9500  | 18   | 150  | 35   | 0.5         | 10         | 100         | 50     | 88x45x14         |
| RRP090100120-15 | 9000        | 10000 | 15   | 120  | 30   | 0.5         | 10         | 100         | 50     | 88x45x14         |





RRP2735200-30  
75 x 30 x 10.7

Radar

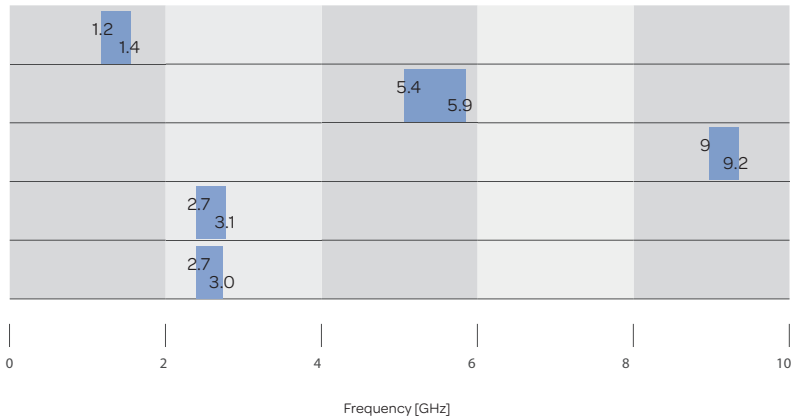


| Part Number   | Freq. (MHz) |       | Gain | Pout | Eff. | Gain | Duty Ratio | Pulse Width | Vds | Dimension      |
|---------------|-------------|-------|------|------|------|------|------------|-------------|-----|----------------|
|               | [Min]       | [Max] | [dB] | [W]  | [%]  | [dB] | [%]        | [μs]        | [V] |                |
| RRP3135900-12 | 3100        | 3500  | 12   | 800  | 56   | 0.5  | 5          | 50          | 50  | -              |
| RRP1214500-14 | 1200        | 1400  | 14   | 560  | 65   | 0.5  | 20         | 200         | 50  | 83x35x12       |
| RRP2731330-09 | 2700        | 3100  | 9    | 400  | 55   | 0.5  | 20         | 500         | 50  | 50x25x12       |
| RRP2933300-HR | 2900        | 3300  | 9    | 320  | 45   | 0.5  | 20         | 200         | 50  | 86x34x10       |
| RRP2933300-SR | 2900        | 3300  | 9    | 320  | 45   | 0.5  | 20         | 200         | 50  | 86x34x10       |
| RRP2731200-08 | 2700        | 3500  | 8    | 250  | 55   | 0.5  | 20         | 500         | 38  | 50.8x35.8x11.1 |
| RRP2735200-30 | 2700        | 3500  | 32   | 230  | 35   | 0.5  | 20         | 1000        | 50  | 75X30X10.7     |
| RRP2735160-35 | 2700        | 3500  | 35   | 180  | 40   | 0.5  | 20         | 2000        | 50  | 76X25X14       |
| RRP2731080-39 | 2700        | 3100  | 39   | 100  | 42   | 0.5  | 20         | 500         | 50  | 100x36x14      |

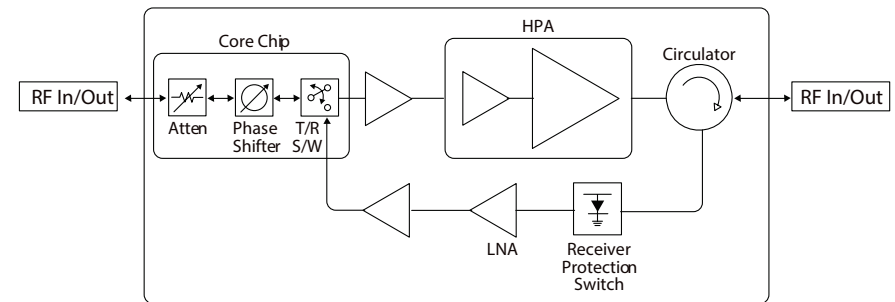


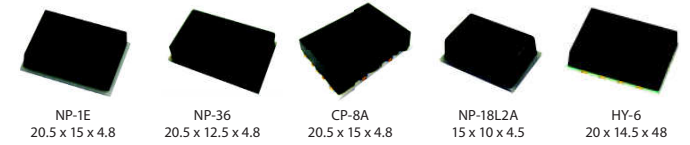
RFCR91-XTRM-015SP-200A  
112 x 30 x 12

Radar

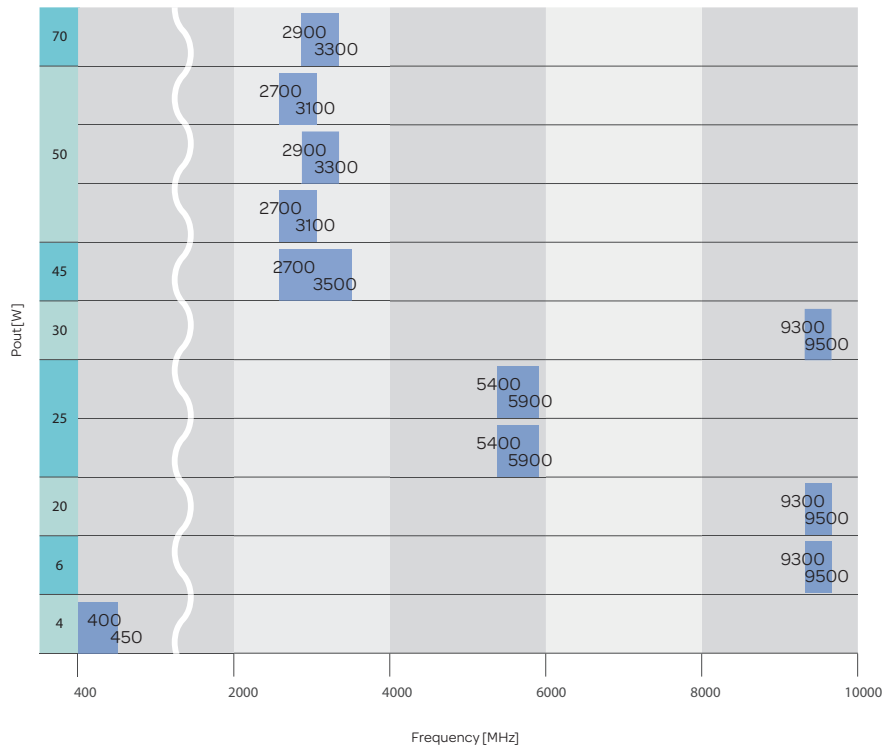


| Part Number               | Freq. (MHz) |       | TX Pout | RX NF | RX Gain | TX Gain | Duty Ratio | Pulse Width | Attenuator  | Phase Shifter |
|---------------------------|-------------|-------|---------|-------|---------|---------|------------|-------------|-------------|---------------|
|                           | [Min]       | [Max] | [W]     | [dB]  | [dB]    | [dB]    | [%]        | [μs]        |             |               |
| RFMR13-LTRM-250-200B      | 1.2         | 1.4   | 250     | 2.5   | 45      | 52      | 10         | 2000        | 6bit,31.5dB | 6bit,360°     |
| RFMR57-CTRM-020SP-500A-SM | 5.4         | 5.9   | 20      | 3.5   | 25      | 40      | 10         | 50          | 6bit,31.5dB | 6bit,360°     |
| RFCR91-XTRM-015SP-200A    | 9           | 9.2   | 12      | 3.5   | 30      | 42      | 10         | 100         | 6bit,31.5dB | 6bit,360°     |
| RFMR29-SFEM-200-400A      | 2.7         | 3.1   | 200     | 3.5   | 25      | 50      | 10         | 100         | -           | -             |
| HR2730-10A                | 2.7         | 3.0   | 10      | 3.5   | 24      | 24      | 10         | 100         | -           | -             |

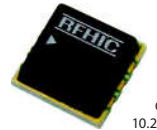




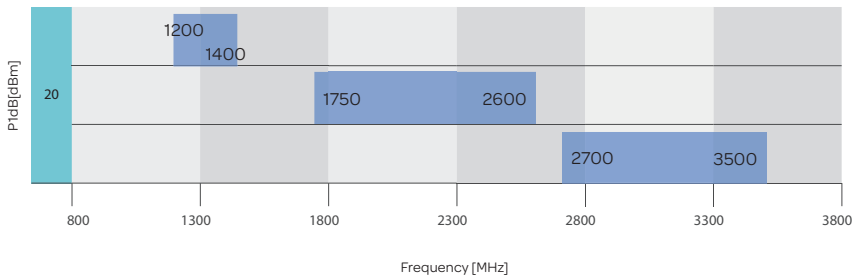
Radars



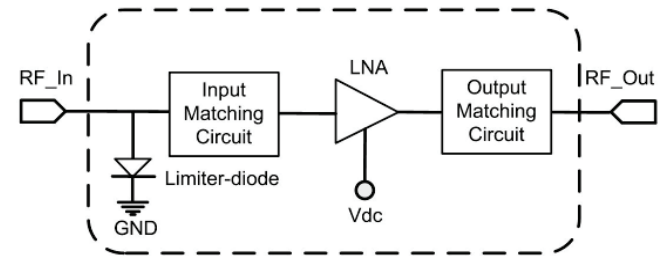
| Part Number | Freq. (MHz) |       | Gain | Pout  | Eff. | Pulse Droop | Duty Ratio | Pulse Width | Vds | Package  |
|-------------|-------------|-------|------|-------|------|-------------|------------|-------------|-----|----------|
|             | [Min]       | [Max] | [dB] | [dBm] | [%]  | [dB]        | [%]        | [ $\mu$ s]  | [V] |          |
| HR2933-70A  | 2900        | 3300  | 25   | 70    | 50   | 0.5         | 10         | 500         | 50  | NP-1E    |
| HR2731-50A  | 2700        | 3100  | 24   | 50    | 50   | 0.5         | 10         | 500         | 50  | NP-1E    |
| HR2933-50A  | 2900        | 3300  | 24   | 50    | 50   | 0.5         | 10         | 500         | 50  | NP-1E    |
| RRC29050-10 | 2700        | 3100  | 24   | 50    | 50   | 0.5         | 10         | 500         | 48  | NP-1E    |
| RRC31050-10 | 2700        | 3500  | 24   | 45    | 45   | 0.5         | 10         | 500         | 48  | NP-1E    |
| HR9395-30A  | 9300        | 9500  | 10   | 30    | 40   | 0.5         | 10         | 100         | 50  | NP-18L2A |
| HR5459-25B  | 5400        | 5900  | 20   | 25    | 40   | 0.5         | 10         | 50          | 50  | NP-36    |
| HR5459-25C  | 5400        | 5900  | 15   | 25    | 40   | 0.5         | 10         | 50          | 28  | NP-36    |
| RRC94030-10 | 9300        | 9500  | 15   | 20    | 35   | 0.5         | 10         | 100         | 48  | CP-8A    |
| HR9395-08A  | 9300        | 9500  | 11   | 6     | 45   | 0.5         | 10         | 100         | 50  | NP-18L2A |
| RNP04006-A1 | 400         | 450   | 33   | 4     | 70   | 0.5         | 10         | 100         | 24  | HY-6     |

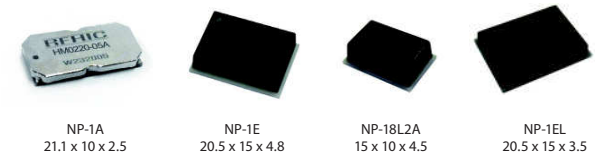


Radar

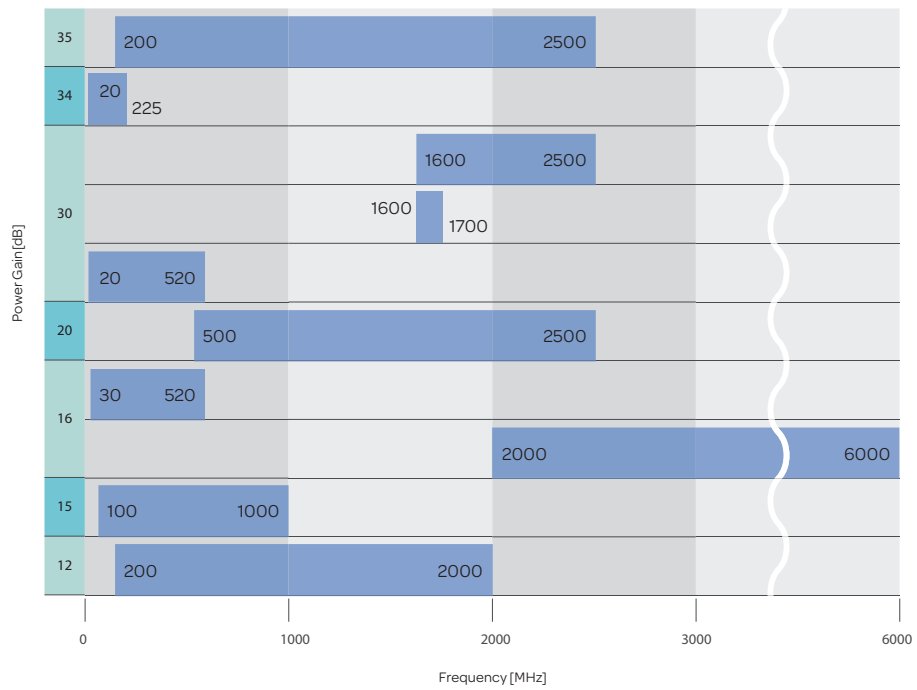


| Part Number | Freq. (MHz) |       | Gain [dB] | NF [dB] | P1dB [dBm] | OIP3 [dBm] | Vdd [V] | Idd [mA] | Maximum Input Power [dBm] | Package |
|-------------|-------------|-------|-----------|---------|------------|------------|---------|----------|---------------------------|---------|
|             | [Min]       | [Max] |           |         |            |            |         |          |                           |         |
| CL1302D-L   | 1200        | 1400  | 18        | 0.7     | 20         | 33         | 5       | 100      | 30                        | CP-16A  |
| CL2102D-L   | 1750        | 2600  | 14.5      | 0.7     | 20         | 33         | 5       | 100      | 30                        | CP-16A  |
| CL3102D-L   | 2700        | 3500  | 11.5      | 1.1     | 20         | 33         | 5       | 100      | 30                        | CP-16A  |

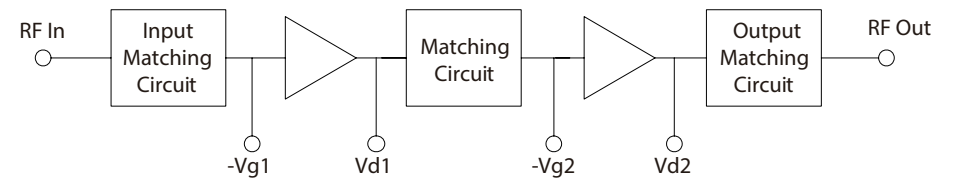


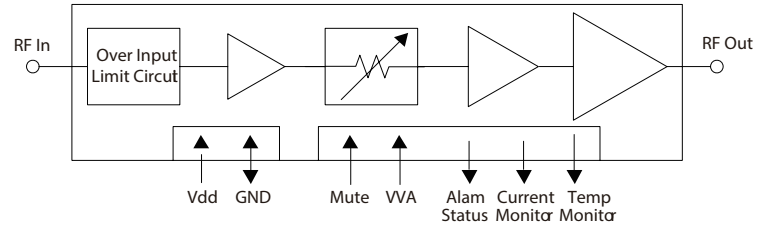


Communication

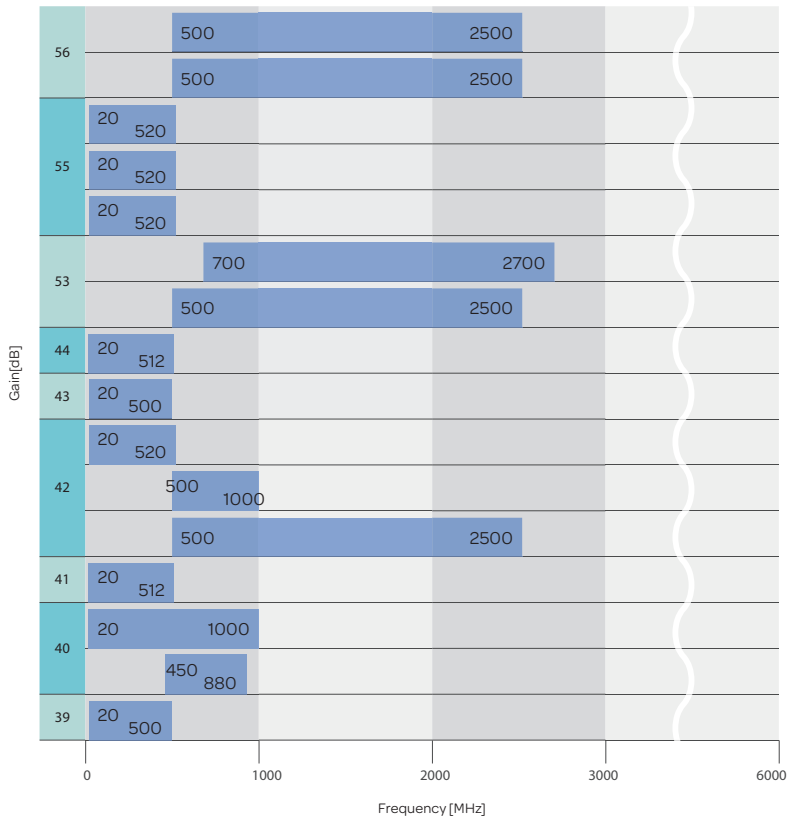


| Part Number | Freq. (MHz) |       | P3dB      | Eff.@P3dB | Power Gain | Vdd | Idd  | Package  |
|-------------|-------------|-------|-----------|-----------|------------|-----|------|----------|
|             | [Min]       | [Max] | [dBm]     | [%]       | [dB]       | [V] | [mA] |          |
| HM0225-05B  | 200         | 2500  | 37        | 35        | 35         | 24  | 525  | NP-1A    |
| HM0002-05A  | 20          | 225   | 37        | 65        | 34         | 22  | 350  | NP-1A    |
| HM1625-03A  | 1600        | 2500  | 35        | 50        | 30         | 14  | 380  | NP-1A    |
| HS1617-06A  | 1600        | 1700  | 38        | 68        | 30         | 20  | 400  | NP-1A    |
| HM0005-10A  | 20          | 520   | 40        | 45        | 30         | 28  | 900  | NP-1E    |
| HM0525-10A  | 500         | 2500  | 40        | 30        | 20         | 28  | 1300 | NP-1E    |
| TG520-10    | 30          | 520   | 40 [39]   | 60        | 16         | 28  | 600  | NP-18L2A |
| HM2060-10A  | 2000        | 6000  | 40 [Psat] | 25        | 16         | 32  | 1400 | NP-1EL   |
| TG1000-10   | 100         | 1000  | 40 [39]   | 50        | 15         | 28  | 700  | NP-18L2A |
| TG2000-10   | 200         | 2000  | 40        | 50        | 12         | 28  | 600  | NP-18L2A |



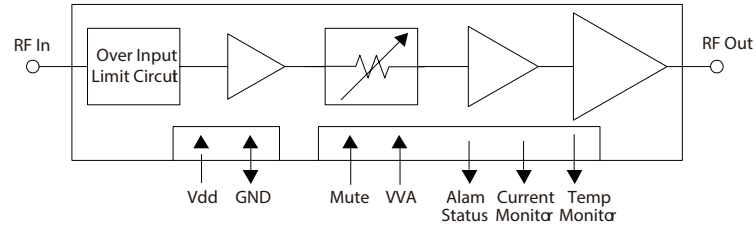


## Communication

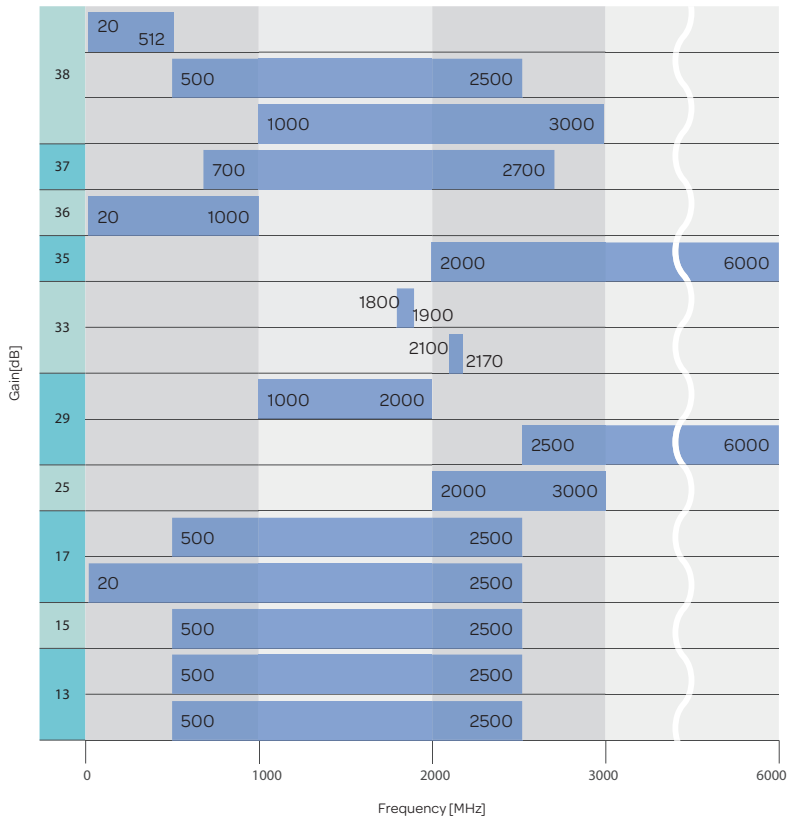


| Part Number | Freq. (MHz) |       | P3dB        | Gain | OIP3  | NF   | Vdd | Idd  | Dimension     | Package |
|-------------|-------------|-------|-------------|------|-------|------|-----|------|---------------|---------|
|             | [Min]       | [Max] | [dBm(peak)] | [dB] | [dBm] | [dB] | [V] | [mA] | [mm]          |         |
| RUM15040-10 | 500         | 2500  | 46 (Psat)   | 56   | -     | -    | 28  | 5.5  | 172x88x24     | -       |
| RUM15040-20 | 500         | 2500  | 46 (Psat)   | 56   | -     | -    | 28  | 5.5  | 188x90x24     | -       |
| RWM03060-10 | 20          | 520   | 49          | 55   | -     | -    | 28  | 7    | 162.6x86.4x27 | -       |
| RWM03125-10 | 20          | 520   | 51          | 55   | -     | -    | 28  | 9    | 162.6x86.4x27 | -       |
| RWM03125-20 | 50          | 520   | 51          | 55   | -     | -    | 28  | 9    | 162.6x86.4x27 | -       |
| RWP15080-10 | 700         | 2700  | 50(Psat)    | 53   | -     | -    | 32  | 10   | 134x105x30    | -       |
| RUM15085-10 | 500         | 2500  | 49.3 (Psat) | 53   | -     | -    | 28  | 9.5  | 254x124x27    | -       |
| RWS02540-10 | 20          | 512   | 46          | 44   | 53    | -    | 28  | 3.5  | 63x38x14.4    | -       |
| RWPO3160-10 | 20          | 500   | 52          | 43   | 54    | -    | 28  | 11   | 120x65x16.7   | -       |
| RWPO3040-10 | 20          | 520   | 46          | 42   | 54    | -    | 28  | 3.8  | -             | DP-75   |
| RWPO6040-60 | 500         | 1000  | 46          | 42   | 48    | -    | 28  | 4.5  | -             | DP-75   |
| RWP15100-R0 | 500         | 2500  | 50          | 42   | -     | -    | 33  | 10   | 189x94x23.6   | -       |
| RWS02520-10 | 20          | 512   | 43          | 41   | 52    | -    | 28  | 2.1  | 63x38x14.4    | -       |
| RWP05020-10 | 20          | 1000  | 43          | 40   | 50    | -    | 28  | 2.3  | -             | DP-75   |
| RWPO6040-10 | 450         | 880   | 45          | 40   | 51    | -    | 28  | 3    | -             | DP-75   |
| RWPO3040-50 | 20          | 500   | 46          | 39   | -     | -    | 28  | 4    | -             | DP-75   |

# Wideband Amplifiers



## Communication



| Part Number   | Freq. (MHz) |       | P3dB        | Gain | OIP3  | NF   | Vdd | Idd  | Dimension      | Package |
|---------------|-------------|-------|-------------|------|-------|------|-----|------|----------------|---------|
|               | [Min]       | [Max] | [dBm(peak)] | [dB] | [dBm] | [dB] | [V] | [mA] | [mm]           |         |
| RWP03060-10   | 20          | 512   | 49(Psat)    | 38   | -     | -    | 32  | 6    | 72x50.8x16.8   | -       |
| RWP15040-10   | 500         | 2500  | 47(Psat)    | 38   | -     | -    | 32  | 5    | 72x50.8x16.8   | -       |
| RWP20050-10   | 1000        | 3000  | 47(Psat)    | 38   | -     | -    | 32  | 5    | 72x50.8x16.8   | -       |
| RWP17050-10   | 700         | 2700  | 47(Psat)    | 37   | -     | -    | 32  | 4.5  | 72x50.8x16.8   | -       |
| RWS05020-10   | 20          | 1000  | 43          | 36   | 51    | -    | 28  | 2.3  | 53.4x25.4x12.7 | -       |
| RUM43020-10   | 2000        | 6000  | 43 (Psat)   | 35   | -     | -    | 28  | 4    | 170x64x21.5    | -       |
| RNP19040-50   | 1800        | 1900  | 47.5        | 33   | -     | -    | 28  | 3.7  | -              | DP-75   |
| RNP21040-50   | 2100        | 2170  | 47.5        | 33   | -     | -    | 28  | 3.9  | -              | DP-75   |
| RWP15020-50   | 1000        | 2000  | 43          | 29   | 50    | -    | 28  | 3.6  | -              | DP-75   |
| RUM43010-10   | 2500        | 6000  | 40 (Psat)   | 29   | -     | -    | 28  | 2.2  | 130x64x21.5    | -       |
| RWP25020-50   | 2000        | 3000  | 44          | 25   | -     | -    | 28  | 2.8  | -              | DP-75   |
| RUP15010-10   | 500         | 2500  | 40          | 17   | -     | -    | 28  | 1    | 55x30x16       | -       |
| RFW2500H10-28 | 20          | 2500  | 36          | 17   | 43    | -    | 28  | 0.7  | -              | DP-34   |
| RUP15020-10   | 500         | 2500  | 43          | 15   | -     | -    | 28  | 2    | 55x30x16       | -       |
| RUP15030-10   | 500         | 2500  | 45          | 13   | -     | -    | 28  | 4    | 90x50x16       | -       |
| RUP15050-10   | 500         | 2500  | 47          | 13   | -     | -    | 28  | 5.5  | 100x50x16      | -       |

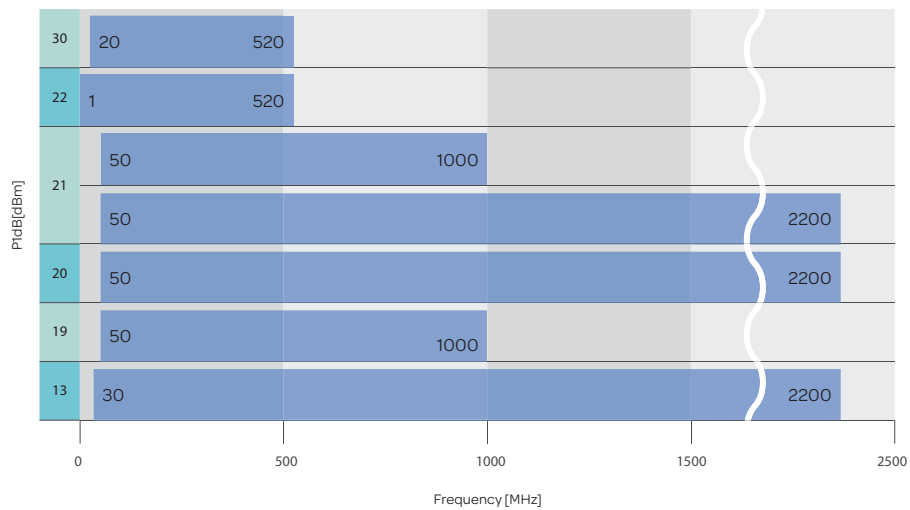


CP-16  
10.2 x 10.2 x 4



CP-6C  
15 x 10 x 4.5

Communication



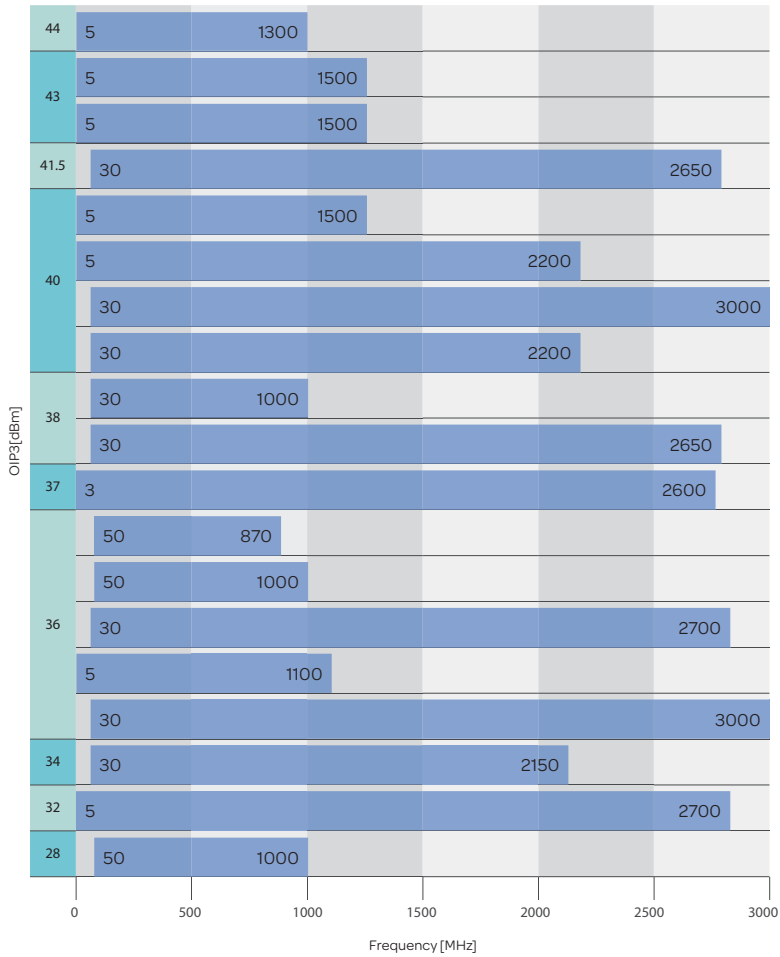
| Part Number | Freq. (MHz) |       | Gain | Flatness | NF      | P1dB  | OIP3  | Vdd | Idd  | Package |
|-------------|-------------|-------|------|----------|---------|-------|-------|-----|------|---------|
|             | [Min]       | [Max] | [dB] | [dB]     | [dB]    | [dBm] | [dBm] | [V] | [mA] |         |
| WLP0640     | 20          | 520   | 19   | 0.8      | 2.5-2.9 | 30    | 42    | 12  | 360  | CP-6C   |
| WL0510      | 1           | 520   | 23   | 1.2      | 1.4-2.0 | 22    | 33    | 5   | 100  | CP-16   |
| WL1015-L    | 50          | 1000  | 16   | 2        | 1.7     | 21    | 35    | 5   | 160  | CP-16A  |
| WL2215-L    | 50          | 2200  | 15   | 4        | 1.7     | 21    | 35    | 5   | 160  | CP-16A  |
| WL2208-L    | 50          | 2200  | 15   | 4        | 1.5     | 20    | 31    | 5   | 100  | CP-16A  |
| WL1008-L    | 50          | 1000  | 16   | 2        | 1.5     | 19    | 31    | 5   | 100  | CP-16A  |
| WL2205-L    | 30          | 2200  | 15.5 | 1.2      | 1.4-1.7 | 13    | 25.8  | 5   | 50   | CP-16A  |



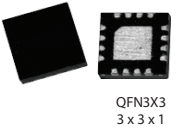
# M MICs (LNA)



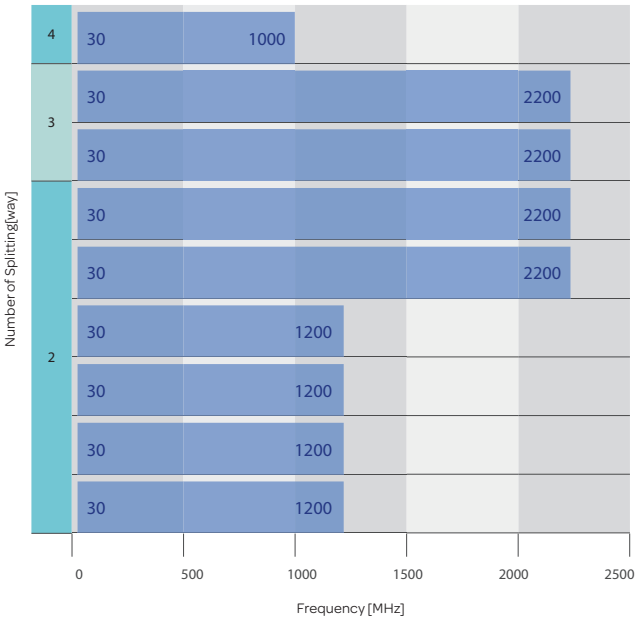
## Cable TV & Broadband



| Part Number | Freq. (MHz) |       | Gain | NF   | OIP3  | P1dB  | CH@Vo  | CTB   | CSO   | Voltage | Current | Package | Process Type |
|-------------|-------------|-------|------|------|-------|-------|--------|-------|-------|---------|---------|---------|--------------|
|             | [Min]       | [Max] | [dB] | [dB] | [dBm] | [dBm] | [dBmV] | [dBc] | [dBc] | [V]     | [mA]    |         |              |
| AE618       | 5           | 1300  | 20   | 3    | 44    | 32    | 79@43  | -64   | -69   | 12      | 360     | SOIC-8  | GaAs E-pHEMT |
| AE607       | 5           | 1500  | 12.5 | 3.5  | 43    | 28    | 79@40  | -69   | -70   | 8       | 250     | SOIC-8  | GaAs E-pHEMT |
| AE617       | 5           | 1500  | 22   | 2.3  | 43    | 28    | 79@40  | -62   | -62   | 8       | 260     | SOIC-8  | GaAs E-pHEMT |
| AE505       | 30          | 2650  | 14   | 3.4  | 41.5  | 24.5  | 79@40  | -65   | -72   | 5       | 220     | SOIC-8  | GaAs E-pHEMT |
| AE417       | 5           | 1500  | 14   | 3    | 40    | 24    | 135@30 | -71   | -62   | 8       | 120     | SOT-89  | GaAs E-pHEMT |
| AE427       | 5           | 2200  | 25   | 2    | 40    | 24    | 135@30 | -70   | -55   | 8       | 130     | SOT-89  | GaAs E-pHEMT |
| AE510       | 30          | 3000  | 19   | 3    | 40    | 23    | 79@30  | -73   | -74   | 5       | 200     | SOIC-8  | GaAs E-pHEMT |
| AE514       | 30          | 2200  | 18   | 2.5  | 40    | 25    | 79@40  | -60   | -64   | 5       | 180     | SOIC-8  | GaAs E-pHEMT |
| ACQ102      | 30          | 1000  | 21.5 | 2.5  | 38    | 21    | 135@30 | -65   | -60   | 5       | 130     | QFN4X4  | GaAs E-pHEMT |
| AE305       | 30          | 2650  | 14.5 | 2.3  | 38    | 22    | 135@30 | -68   | -60   | 5       | 110     | SOT-89  | GaAs E-pHEMT |
| AP112       | 3           | 2600  | 18   | 3    | 37    | 18    | 135@30 | -67   | -53   | 5       | 110     | SOT-89  | GaAs HBT     |
| ACQ624      | 50          | 870   | 34.5 | 2    | 36    | 23    | 79@25  | -75   | -70   | 5       | 280     | QFN4X4  | GaAs E-pHEMT |
| ACQ629      | 50          | 1000  | 37.5 | 2    | 36    | 22    | 135@30 | -65   | -60   | 12      | 130     | QFN4X4  | GaAs E-pHEMT |
| AE314       | 30          | 2700  | 21   | 2    | 36    | 21    | 135@30 | -63   | -54   | 5       | 100     | SOT-89  | GaAs E-pHEMT |
| AE342A      | 5           | 1100  | 16   | 2    | 36    | 20    | 135@30 | -69   | -60   | 5       | 90      | SOT-89  | GaAs E-pHEMT |
| AE410       | 30          | 3000  | 20   | 2.1  | 36    | 20    | 135@20 | -80   | -65   | 5       | 100     | SOT-89  | GaAs E-pHEMT |
| AE512       | 30          | 2150  | 17   | 1.5  | 34    | 20    | 79@30  | -61   | -65   | 5       | 100     | SOIC-8  | GaAs E-pHEMT |
| AE312       | 5           | 2700  | 20   | 1    | 32    | 18    | 135@15 | -80   | -60   | 5       | 50      | SOT-89  | GaAs E-pHEMT |
| AE308       | 50          | 1000  | 22   | 2    | 28    | 17    | 135@16 | -64   | -58   | 5       | 55      | SOT-89  | GaAs E-pHEMT |



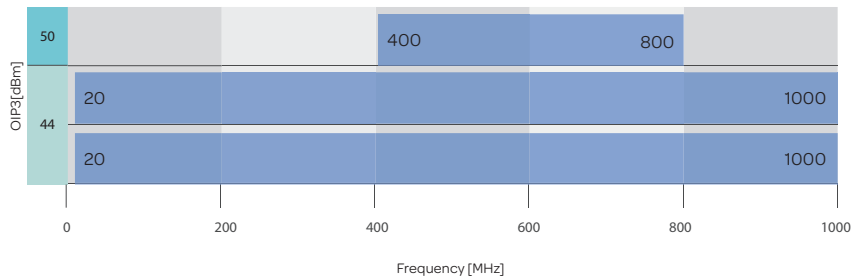
Cable TV & Broadband



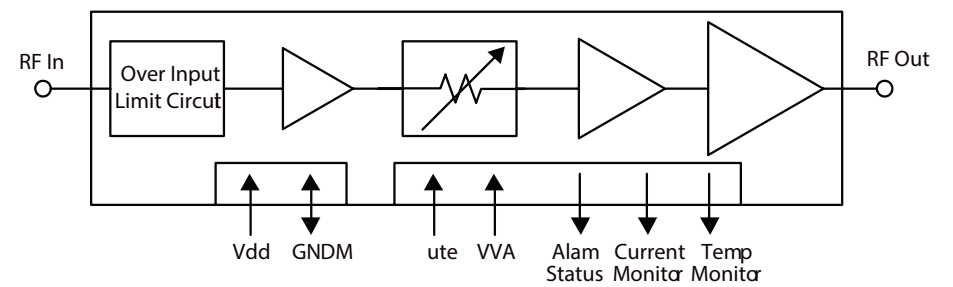
| Part Number | Freq. (MHz) |       | Gain | NF   | InOutISL | OutOutISL | OIP3  | P1dB  | CTB   | CSO   | XMOD  | Volt | Current | Package | Process Type | Splitter |
|-------------|-------------|-------|------|------|----------|-----------|-------|-------|-------|-------|-------|------|---------|---------|--------------|----------|
|             | [Min]       | [Max] | [dB] | [dB] | [dB]     | [dB]      | [dBm] | [dBm] | [dBc] | [dBc] | [dBc] | [V]  | [mA]    |         |              |          |
| AD412       | 30          | 1000  | 6    | 4.5  | -25      | -30       | 27    | 13    | -70   | -58   | -60   | 3.3  | 160     | QFN3X3  | GaAs E-pHEMT | 4        |
| AD311       | 30          | 2200  | 8    | 4.5  | -25      | -40       | 32    | 17.8  | -72   | -63   | -65   | 5    | 120     | QFN3X3  | GaAs E-pHEMT | 3        |
| AD311       | 30          | 2200  | 8    | 4    | -25      | -35       | 30    | 14    | -72   | -59   | -65   | 3.3  | 110     | QFN3X3  | GaAs E-pHEMT | 3        |
| AD211       | 30          | 2200  | 8    | 4    | -26      | -35       | 30    | 16.5  | -73   | -63   | -65   | 5    | 90      | QFN3X3  | GaAs E-pHEMT | 2        |
| AD211       | 30          | 2200  | 8    | 3.5  | -25      | -35       | 30    | 14    | -73   | -57   | -65   | 3.3  | 90      | QFN3X3  | GaAs E-pHEMT | 2        |
| AD254       | 30          | 1200  | 4.5  | 3.5  | -30      | -20       | 28    | 12    | -71   | -59   | -73   | 5    | 110     | QFN3X3  | GaAs E-pHEMT | 2        |
| AD254       | 30          | 1200  | 4    | 3.5  | -30      | -20       | 20    | 8     | -62   | -55   | -61   | 3.3  | 75      | QFN3X3  | GaAs E-pHEMT | 2        |
| AD274       | 30          | 1200  | 5.5  | 3.5  | -30      | -20       | 26    | 12    | -62   | -57   | -66   | 5    | 110     | QFN3X3  | GaAs E-pHEMT | 2        |
| AD274       | 30          | 1200  | 5    | 3.3  | -30      | -20       | 18    | 8     | -58   | -51   | -56   | 3.3  | 75      | QFN3X3  | GaAs E-pHEMT | 2        |

# A Wideband Amplifiers

Cable TV & Broadband



| Part Number    | Freq. (MHz) |       | P3dB         | OIP3  | Gain | NF   | Vdd | Idd  | Package  |
|----------------|-------------|-------|--------------|-------|------|------|-----|------|----------|
|                | [Min]       | [Max] | [dBm] (p1dB) | [dBm] | [dB] | [dB] | [V] | [mA] |          |
| RFC042         | 400         | 800   | -            | 50    | 23   | 4    | 24  | 400  | DP-27    |
| RFC1G21H4-24   | 20          | 1000  | 36           | 44    | 21   | -    | 24  | 550  | DP-27    |
| RFC1G21H4-24-S | 20          | 1000  | 36           | 44    | 21   | -    | 24  | 550  | SOT-115J |




# T RANSISTOR

|   |   |   |  |
|---|---|---|--|
| RF12001DKR3<br>10.2 x 10.2 x 4.1  | NS-AS01<br>10.2 x 10.2 x 4.1  | NS-CS01<br>5.1 x 4.1 x 4  | RF24001DKR3<br>20.5 x 10 x 4   |
|  |  |  |  |

|    |   |                   |   |
|----|---|-------------------|---|
| VA | HY-46<br>4.5 x 4 x 1.5  | Active<br>Divider | QFN4x4<br>4 x 4 x 1   |
|    |  |                   |  |

# S MD MODULE

|   |   |   |  |
|---|---|---|--|
| NP-8CL<br>28 x 19 x 4.8   | NP-1E<br>20.5 x 15 x 4.8  | NP-1EL<br>20.5 x 15 x 3.5   | NP-18L2A<br>15 x 10 x 4.5  |
|    |    |    |  |
| NP-26<br>20.5 x 15 x 4.8  | NP-36<br>20.5 x 12.5 x 4.8  | CP-8A<br>20.5 x 15 x 4.8  |  |
|   |   |   |  |
| HY-6<br>20 x 14.5 x 4.8   | NP-1A<br>21.1 x 10 x 2.5  | SP-1E<br>32 x 20 x 4.2  |  |
|  |  |  |  |

|      |   |   |   |   |
|------|---|---|---|---|
| MMIC | SOT-143<br>2.8 x 2.4 x 1  | SOIC-8<br>5 x 6 x 1.5   | SOT-89<br>4.5 x 4 x 1.5   | QFN3X3<br>3 x 3 x 1   |
|      |  |  |  |  |

|     |  |  |
|-----|--|--|
| LNA | CP-16<br>10.2 x 10.2 x 4   | CP-6C<br>15 x 10 x 4.5   |
|     |  |  |

|    |   |   |   |   |
|----|---|---|---|---|
| WB | DP-34<br>38 x 50.8 x 12.5   | DP-75<br>70 x 51 x 17.1   | DP-27<br>44.4 x 20 x 13.5   | SOT-115J<br>44.4 x 15 x 21.1  |
|    |  |  |  |  |

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