

Internally Matched GaAs FET Series for C Band High Power Amplifiers

| Type Number | Output Power at 1dB Gain Compression(dBm) | | Linear Power Gain(dB) | 3rd Order IM Distortion(dBc) | | Power Added Efficiency(%) | Frequency (GHz) | Drain-Source Voltage(V) | Drain Current (A) | Thermal Resistance (C/W) | | Package Outline | Available Spec. No. |
|--------------|---|------|-----------------------|------------------------------|------|---------------------------|-----------------|-------------------------|-------------------|--------------------------|------|-----------------|---------------------|
| | Min. | Typ. | | Min. | Typ. | | | | | Min. | Typ. | | |
| MGFC36V4450A | 35 | 37 | 9 | -42 | -45 | 32 | 4.4~5.0 | 10 | 1.2 | 5 | 6 | GF-8 | -51 |
| MGFC36V5258 | 35 | 36 | 9 | -42 | -45 | 33 | 5.2~5.8 | 10 | 1.2 | - | 6 | GF-8 | -51 |
| MGFC36V5964A | 35 | 37 | 9 | -42 | -45 | 30 | 5.9~6.4 | 10 | 1.2 | 5 | 6 | GF-8 | -51 |
| MGFC36V6472A | 35 | 37 | 8 | -42 | -45 | 30 | 6.4~7.2 | 10 | 1.2 | 5 | 6 | GF-8 | -51 |
| MGFC40V4450 | 39.5 | 40.5 | 9 | -42 | -45 | 32 | 4.4~5.0 | 10 | 2.4 | - | 3.5 | GF-18 | -51 |
| MGFC40V5258 | 39.5 | 40.5 | 8 | -42 | -45 | 32 | 5.2~5.8 | 10 | 2.4 | - | 3.5 | GF-18 | -51 |
| MGFC40V5964 | 39.5 | 40.5 | 8 | -42 | -45 | 30 | 5.9~6.4 | 10 | 2.4 | 3 | 3.5 | GF-18 | -51 |
| MGFC40V6472 | 39.5 | 40.5 | 7 | -42 | -45 | 32 | 6.4~7.2 | 10 | 2.4 | - | 3.5 | GF-18 | -51 |
| MGFC42V4450 | 41.5 | 42.5 | 9 | -42 | -45 | 32 | 4.4~5.0 | 10 | 4.5 | - | 1.9 | GF-18 | -51 |
| MGFC42V5258 | 41.5 | 42.5 | 8 | - | - | 31 | 5.2~5.8 | 10 | 4.5 | - | 1.9 | GF-18 | -01 |
| MGFC42V5964A | 41.5 | 42.5 | 8 | -42 | -45 | 33 | 5.9~6.4 | 10 | 4.5 | - | 1.6 | GF-38 | -51 |
| MGFC45V4450A | 44 | 45 | 9 | - | -45 | 34 | 4.4~5.0 | 10 | 8 | 0.8 | 1 | GF-38 | -01 |
| MGFC45V5964A | 44 | 45 | 8 | -42 | -45 | 33 | 5.9~6.4 | 10 | 8 | 0.8 | 1 | GF-38 | -51 |
| MGFC47V5864 | 46 | 47 | 8.5 | - | - | 35 | 5.8~6.4 | 10 | 9.8 | 0.8 | 0.9 | GF-53 | -01 |
| MGFC47V4450 | 46 | 47 | 9.5 | - | - | 40 | 4.4~5.0 | 10 | 9.8 | 0.8 | 0.9 | GF-53 | -01 |

Ta=25°C

Internally Matched GaAs FET Series for X/Ku Band High Power Amplifiers

| Type Number | Output Power at 1dB Gain Compression(dBm) | | Linear Power Gain(dB) | Power Added Efficiency(%) | Frequency (GHz) | Drain-Source Voltage(V) | Drain Current (A) | Thermal Resistance (C/W) | | Package Outline | Available Spec. No. |
|-------------|---|------|-----------------------|---------------------------|-----------------|-------------------------|-------------------|--------------------------|------|-----------------|---------------------|
| | Min. | Typ. | | | | | | Typ. | Tax. | | |
| MGFK38A3745 | 37 | 38 | 7 | 30 | 13.75~14.5 | 10 | 1.5 | 3.6 | 4 | GF-27 | -01 |
| MGFK41A4045 | 40 | 41 | 6 | 25 | 10.4~14.5 | 10 | 3 | 1.8 | 2.2 | GF-8 | -01 |
| MGFK44A4045 | 43 | 44 | 5 | 17 | 14.0~14.5 | 10 | 6 | 1.2 | 1.5 | GF-38 | -01 |

Ta=25°C

GaAs FET Series for Microwave- Band Low-Noise Amplifiers

| Type Number | Application | Frequency (GHz) | Pro(dBm) | Vcc(V) | Vrf(V) | PAE(%) | Pin(dBm) | Package Outline |
|---------------|---------------|-----------------|-----------|--------|--------|-----------|--------------|-----------------|
| BAO1223 | N-CDMA | 898~925 | 27,5 | 3.5 | 2.85 | 40 | 0 | GH-46 |
| BAO1227* | N-CDMA | 824-830,898~925 | 28,0 | 3.5 | 2.85 | 37 | 0 | GH-46 |
| BAO1266* | N-CDMA | 1920~1940 | 27,5 | 3.5 | 2.85 | 42 | 1.0 | GH-44 |
| BAO1267** | W-CDMA | 830~840 | 26,5 | 3.5 | 2.90 | 47 | -0.5 | GH-44 |
| BAO1268* | W-CDMA | 1920~1980 | 26,5 | 3.5 | 2.90 | 47 | -1.5 | GH-44 |
| BAO1269* | W-CDMA | 1750~1785 | 26,5 | 3.5 | 2.90 | 47 | -1.0 | GH-44 |
| BAO1261** | W-CDMA(HSDPA) | 824~849 | 26,5 | 3.5 | 2.90 | 39 | -1.0 | GH-44 |
| BAO1262** | W-CDMA(HSDPA) | 1920~1980 | 26,5 | 3.5 | 2.90 | 42 | -1.0 | GH-44 |
| BAO1263** | W-CDMA(HSDPA) | 1750~1785 | 26,5 | 3.5 | 2.90 | 43 | -0.5 | GH-44 |
| BAO1256** | W-CDMA(HSDPA) | 824~849 | 27.5/16/8 | 3.4 | - | 38.5/24/7 | 2/-7/-14 | GH-52 |
| BAO1286** | W-CDMA(HSDPA) | 880~915 | 28.5/16/8 | 3.4 | - | 38/24/7 | 1.5/-6.5/-14 | GH-52 |
| BAO1285** | W-CDMA(HSDPA) | 1710~1755 | 27/16/8 | 3.4 | - | 37/22/6,5 | 0/-6.5/-14 | GH-51 |
| BAO1282** | W-CDMA(HSDPA) | 1749,9~1784,9 | 27/16/8 | 3.4 | - | 35/21/6 | 0/-6/-13.5 | GH-51 |
| BAO1255** | W-CDMA(HSDPA) | 1850~1910 | 28.5/16/8 | 3.4 | - | 37/24/7 | 1.5/-7/-14.5 | GH-51 |
| BAO1254A* | W-CDMA(HSDPA) | 1920~1980 | 27/16/8 | 3.4 | - | 38/24/7 | 0/-5.5/-13 | GH-51 |
| MGFS36E2325** | WiMAX-CPE | 2300~2500 | 27.0 | 6 | 2.85 | 12 | -5 | GH-48 |
| MGFS36E2527** | WiMAX-CPE | 2500~2700 | 27.0 | 6 | 2.85 | 12 | -5 | GH-48 |
| MGFS36E3436** | WiMAX-CPE | 3400~3600 | 27.0 | 6 | 2.85 | 10 | 0 | GH-48 |

*: New product **: Under Development

GaAs High Power Module

| Type Number | Application | fL (GHz) | fH (GHz) | P1dB (dBm) | Gp(dB) | Vd(V) | Lt(A) | Remarks | Package Outline |
|--------------|-------------|----------|----------|------------|--------|-------|--------|-----------------|-----------------|
| MGFS40H2201G | MMDS CPE | 2.5 | 2.7 | 40 | 21 | 10 | 3 *1 | Pulse operation | GH-45 |
| MGFS40H3301G | MMDS CPE | 3.4 | 3.6 | 40 | 22 | 10 | 2.9 *2 | Pulse operation | GH-50 |

*1 Pout=31.5dBm, **2 Pout=34.5dBm