

- Robust 0.25 micron gate-length PHEMT MMICs
- Ultra Broadband Performance, (1-20 GHz, and 2-10 GHz)
- Range of PSAT from +15 dBm to +30 dBm
- Designed for EW, Radar, Communications, and Instrumentation applications
- Available in chip form and custom packaging
- Input and Output matched to 50 ohms
- Space / Hi-Rel screening available

Military/Commercial MMICs

Model	Case Code	Freq Range	Linear Gain Typ/Min dB	Gain Flatness Typ/Max ± dB	Input Return Loss Typ dB	Output Return Loss Typ dB	Noise Figure Typ dBm	Pout @ -1 dB Typ/Min dBm	IP3 Typ dBm	Vgs Voltage Applied V	DC Voltage Applied V	DC Current Typ/Max mA
► New	QFN	GHz										
► MMA-021015 In Production	chip	2-10	18.0 / -	2.5 / -	-12	-15	4,8	17.0 / -		NA	6,0	89 / -
► MMA-022028 In Development	chip	2-10	7.0 / 6.0	1.0 / -	-10	-15	6,5	28.0 / 26.0		-0,3	8,0	420 / 500

Instrumentation and Communication MMICs

Model	Case Code	Freq Range	Linear Gain Typ/Min dB	Gain Flatness Typ/Max ± dB	Input Return Loss Typ dB	Output Return Loss Typ dB	Noise Figure Typ dBm	Pout @ -1 dB Typ/Min dBm	IP3 Typ dBm	Vgs Voltage Applied V	DC Voltage Applied V	DC Current Typ/Max mA
► New	QFN	GHz										
► MMA-206024-Q3 In Development	3X3	2.0-6.0	17.0 / 15.0	1.0 / 1.5	12	12 ⁽¹⁾ /10 ⁽²⁾	3,5	25.0 / 24.0	40,0	-0,9	8,0	250 / 300
► MMA-053223-Q3 In Production	3X3	0.5-3.2	12.0 / -	1.5 / -	10	10	3,5	24.0 / -	42,0	NA	6,0	120 / 200

⁽¹⁾ @ 2-4 GHz, ⁽²⁾ @ 4-6 GHz

WiMAX / WLAN MMICs

- Operates in all WiMAX / WLAN frequency ranges 2.5, 3.5, and 5.5 GHz
- Pave @ 2% EVM up to +29.5 dBm @ 3.5 GHz
- P-1dB options; +36.5dBm, +33dBm, and +30dBm
- Two gain configurations; Single and dual stage
- Ideally suited for power amplification of WiMAX / WLAN base stations, or access points
- Input and Output matched to 50 ohms
- Available in RoHS Compliant Low Cost QFN packages

Model	Case Code	Freq Range	Linear Gain Typ/Min dB	Gain Flatness Typ/Max ± dB	Input Return Loss Typ dB	Output Return Loss Typ dB	Pout @ -1 dB Typ/Min dBm	Pout @ 2.0% EVM Typ dBm	IP3 Typ dBm	Vgs Voltage Applied V	DC Voltage Applied V	DC Current Typ/Max mA
► New	QFN	GHz										
► MMA-232730-Q4 In Development	4X4	2.3-2.7	24.0 / 20.0	1.0 / 1.2	10	8	29.0 / -	22,0	45,0	-0,9	7,5	450 / 500
► MMA-232733-Q5 In Development	5X5	2.3-2.7	10.5 / 10.0	0.8 / 0.9	NA	NA	33.0 / 32.5	26,0	46,0	-1,0	7,5	600 / -
► MMA-333737-Q10 In Development	10X10	3.3-3.7	13.0 / 12.0	NA	NA	NA	36.5 / -	29,0	48,0	NA	8,5	1000 / -
► MMA-333830-Q4 In Development	4X4	3.3-3.8	11.0 / 10.0	1.0 / 1.2	7	10	28.5 / -	21,5	45,0	-0,9	7,5	300 / 400
► MMA-333833-Q5 In Development	5X5	3.3-3.8	11.0 / 9.0	1.0 / 1.2	10	10	33.0 / -	25,0	46,0	-0,9	7,5	600 / 800
► MMA-343737-Q10 In Development	10X10	3.4-3.7	13.0 / 12.0	NA	NA	NA	36.5 / -	29,0	48,0	NA	8,5	1000 / -
► MMA-495930-Q4 In Development	4X4	4.9-5.9	20.0 / 18.0	1.0 / 1.2	8	8	30.0 / -	22,0	45,0	-0,9	7,5	450 / 500
► MMA-495933-Q5 In Production	5X5	4.9-5.9	10.5 / 10.0	0.8 / 0.9	NA	NA	33.0 / 32.5	26,0	46,0	-1,0	7,5	600 / -