C to V Band Power Amplifier MMICs (Chip)

Sumitomo Electric is providing a full line-up of GaAs power amplifier MMIC chips with output power at 50mW to 3W. These MMICs are designed for VSAT (Very Small Aperture Terminal) and radio link transmitter applications that require high power, high gain and low distortion in a 50Ω system. Sumitomo Electric has a full line-up of MMIC products specified from C-band through V-band.

Features

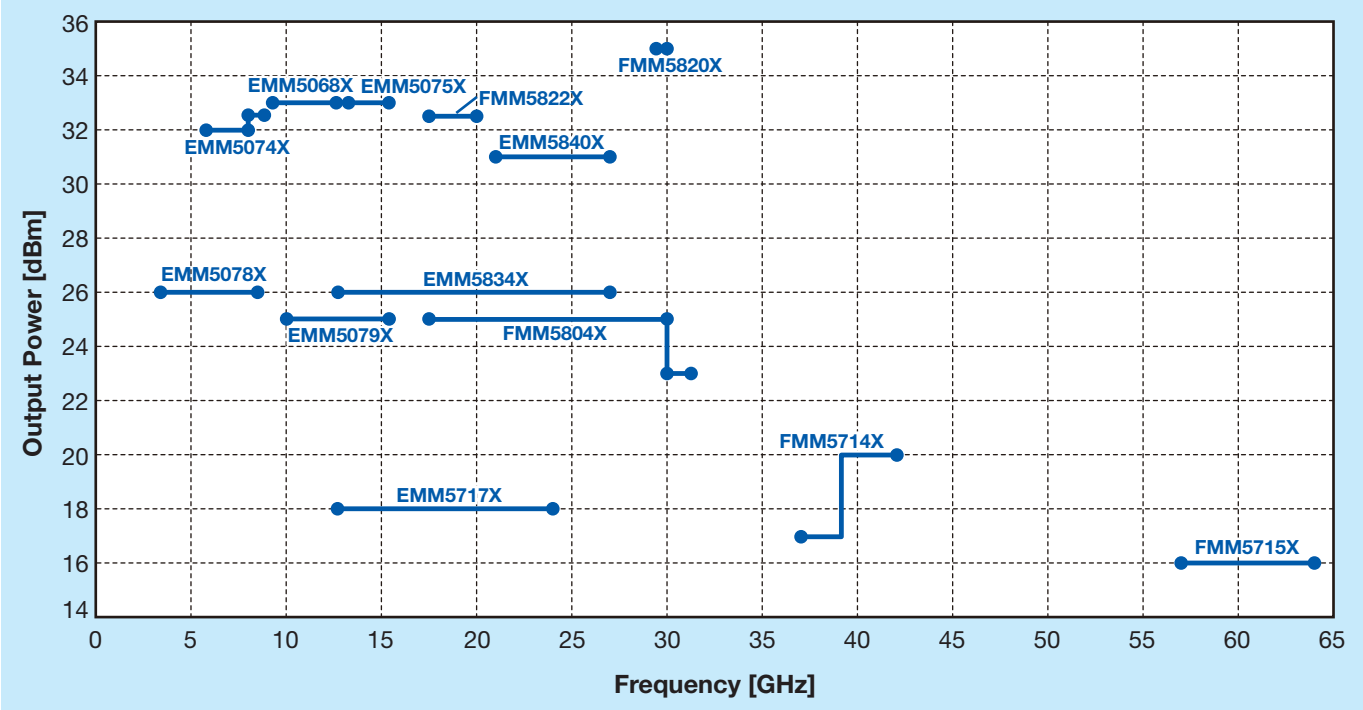
- Input and Output Internally Matched Zin/Zout = 50Ω
- High Output Power (Up to 3W)
- High Gain
- Low Distortion
- High Reliability

Naming Rules

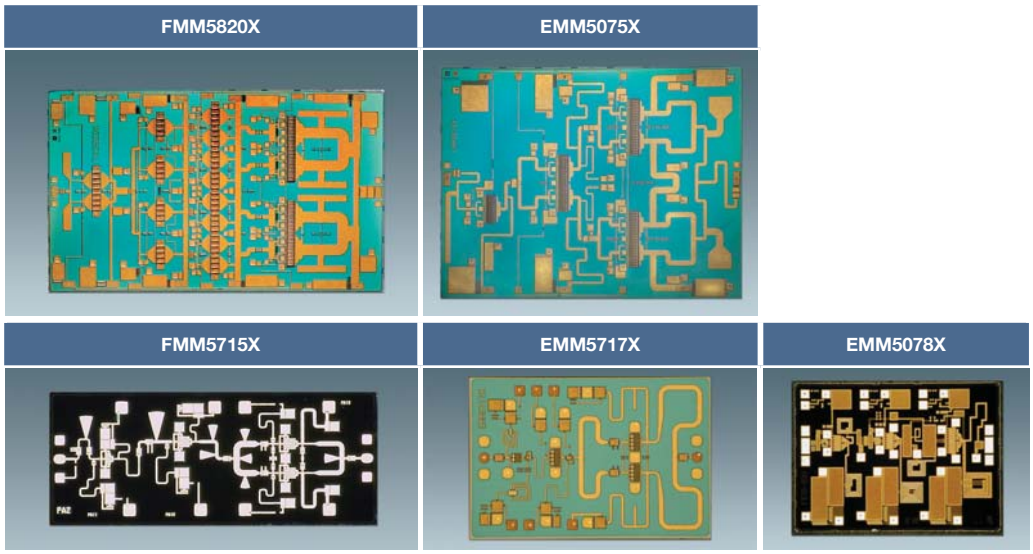
EM M 5078 X

- X: Chip
- Number
- Monolithic IC
- Microwave

♦Power Amplifier MMIC Lineup (Chip)



Package Photo



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Specifications

Ta=+25°C

Part Number	Frequency Range f (GHz)	Output Power at 1dB G.C.P. P1dB dBm (Typ.)	Gain at 1dB G.C.P. G1dB dB (Typ.)	3rd. Order Intercept Point OIP3 dBm (Typ.)	Drain-Source Voltage VDD (V)	Drain Current at 1dB G.C.P. IDD mA (Typ.)	Function/Application
EMM5078X	3.4–8.5	26	29	35	6	350	Driver Amp., LO Buffer Amp. C-Band VSAT and Radio Link
EMM5074X	5.8–8.5	32 (f=5.8–7.1GHz) 32.5 (f=7.1–8.5GHz)	27	41	6	1450	Power Amp. C-Band VSAT and Radio Link
EMM5068X	9.5–13.3	33	25	42.5	6	1500	Power Amp. Radio Link
EMM5079X	10–15.4	25	22.5	31 (f=10–11.7GHz) 35 (f=11.7–15.4GHz)	6	350	Driver Amp., LO Buffer Amp. Ku-Band VSAT and Radio Link
EMM5717X	12.7–24	18	22	-	3	180	
EMM5834X	12.7–27	26	23	32.5	6	370	
EMM5075X	12.7–15.4	33	26	43.5	6	1300	Power Amp. Ku-Band VSAT and Radio Link
FMM5804X	17.5–31.5	25 (f=17.5–30GHz) 23 (f=30–31.5GHz)	18	-	6	300	Driver Amp. Ka-Band VSAT and Radio Link
FMM5822X	17.5–20	32.5	21	41	6	1000	Power Amp. Radio Link
EMM5840X	21–27	31	24	39	6	1000	
FMM5820X	29.5–30	35	23	-	7	2200	Power Amp. Ka-Band VSAT and Radio Link
FMM5714X	37–42	17 (f=37GHz) 20 (f=42GHz)	21	26.5 (f=37GHz) 29 (f=42GHz)	3	200	Power Amp. Ku-Band VSAT
FMM5715X	57–64	16	17	-	3	150	Power Amp. Radio Link

G.C.P.: Gain Compression Point