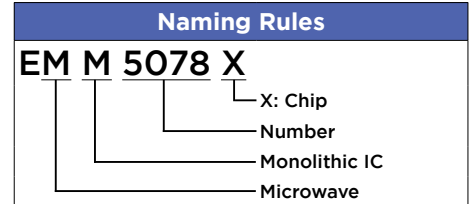


# C to V Band Power Amplifier MMICs (Die)

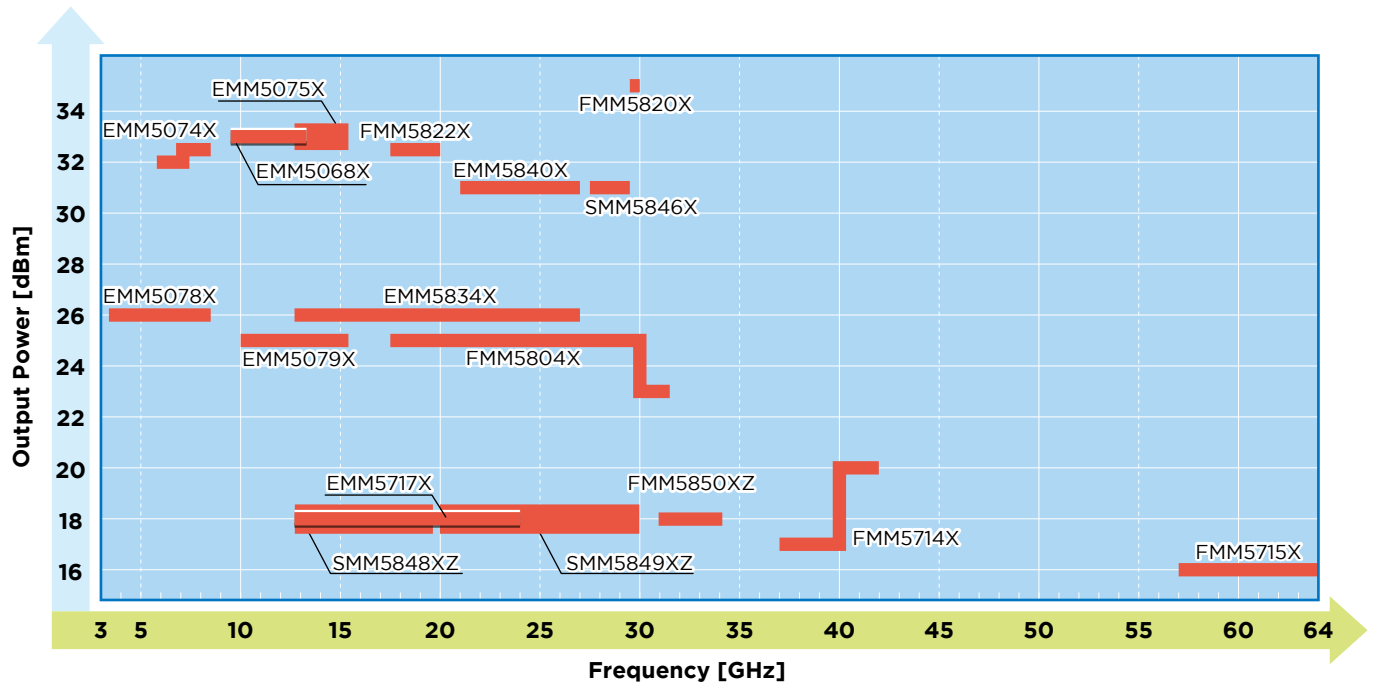
Sumitomo Electric is providing a full line-up of GaAs power amplifier MMIC chips with output power at 50mW to 3W. These MMICs are designed for VSAT (Very Small Aperture Terminal) and radio link transmitter applications that require high power, high gain and low distortion in a 50Ω system. Sumitomo Electric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

## Features

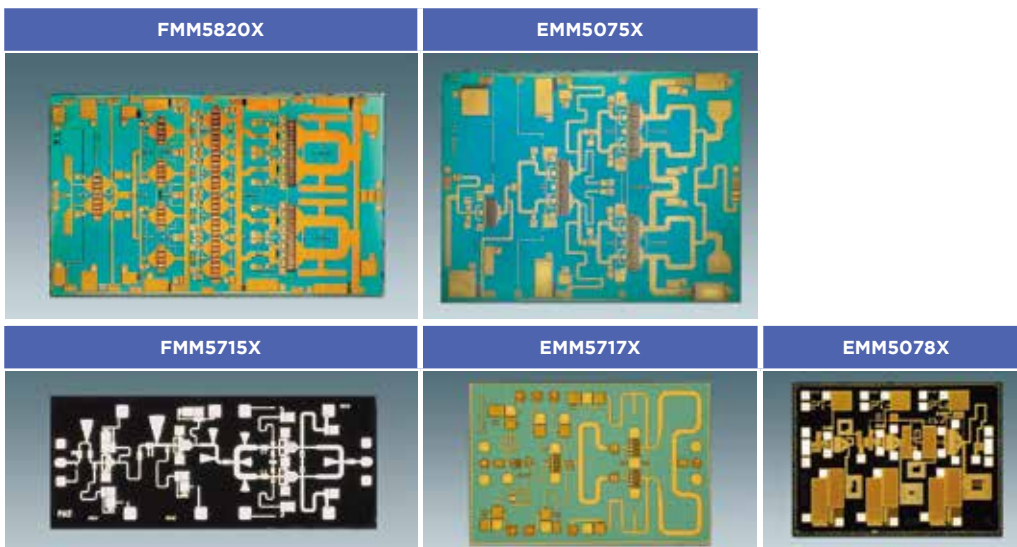
- Input and Output Internally Matched  $Z_{in}/Z_{out} = 50\Omega$
- High Output Power (Up to 3W)
- High Gain
- Low Distortion
- High Reliability



## Power Amplifier MMIC Lineup (Die)



## Product Photo



## Specifications

Part Number	Freq. (GHz)	P1dB (dBm)	G1dB (dBm)	OIP3 (dBm)	VDD (V)	IDC (DC) (mA)	IDC (P1dB) (mA)	Function/Application
EMM5078X	3.4-8.5	26	29	35	6	300	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	1400	1450	Power Amp.C-Band VSAT and Radio Link
EMM5068X	9.5-13.3	33	25	42.5	6	1500	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	350	Driver Amp., LO Buffer Amp.Ku-Band VSAT and Radio Link
EMM5075X	12.7-15.4	33	26	43.5	6	1200	1300	Power Amp.Ku-Band VSAT and Radio Link
SMM5848XZ	12.7-19.7	18	22	28	3	280	300	Power Amp.Radio Link
EMM5717X	12.7-24	18	22	-	3	-	180	Driver Amp., LO Buffer Amp.Ku-Band VSAT and Radio Link
EMM5834X	12.7-27	26	23	32.5	6	300	370	
FMM5822X	17.5-20	32.5	21	41	6	850	1000	Power Amp.Radio Link
FMM5804X	17.5-31.5	25 (f=17.5-30GHz) 23 (f=30-31.5GHz)	18	-	6	250	300	Driver Amp.Ka-Band VSAT and Radio Link
SMM5849XZ	20-30	18	29	27	3	300	320	Power Amp.Radio Link
EMM5840X	21-27	31	24	39	6	800	1000	
SMM5846X	27.5-29.5	31	19	39	6	1100	1450	
FMM5820X	29.5-30	35	23	-	7	1500	2200	Power Amp.Ka-Band VSAT and Radio Link
SMM5850XZ	31-34	18	19	27	3	300	320	Power Amp.Radio Link
FMM5714X	37-42	17(f=37GHz) 20(f=42GHz)	21	26.5(f=37GHz) 29(f=42GHz)	3	200	200	Power Amp.Ku-Band VSAT
FMM5715X	57-64	16	17	-	3	150	150	Power Amp.Radio Link

G.C.P.: Gain Compression Point  
Note: Ta=+25°C