

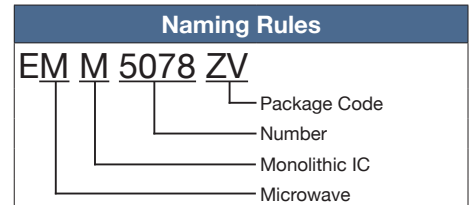
C to Ka Band Power Amplifier MMICs (Packages)

Sumitomo Electric provides GaAs power amplifier MMICs mounted in a suitable high frequency package with output power 50mW - 2W at frequencies ranging from C-band to Ka-band. Sumitomo Electric provides various types of packages including highly reliable hermetically sealed types, low cost surface mount types and very low cost QFN types.

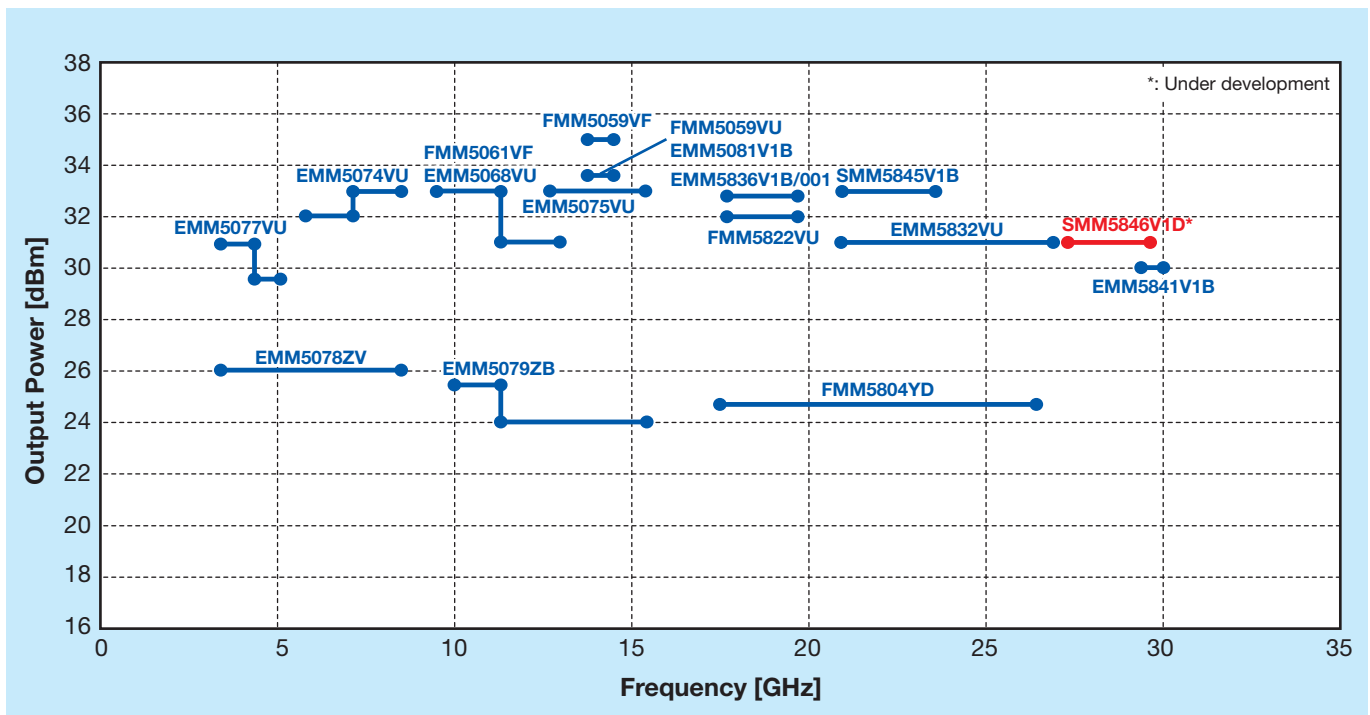
These MMICs can be packaged to meet the customer's cost/performance requirements.

Features

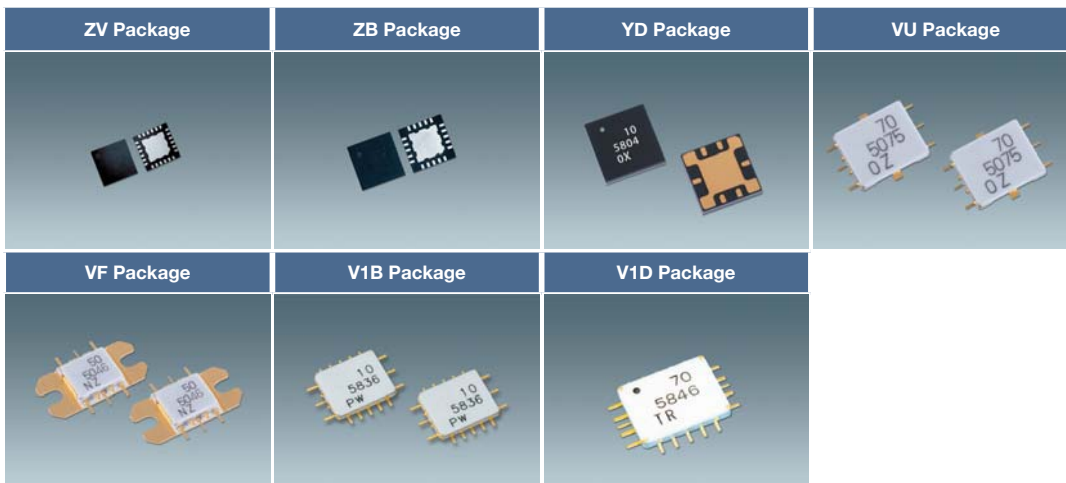
- Input and Output Internally Matched $Z_{in}/Z_{out} = 50\Omega$
- High Output Power (Up to 2W)
- High Gain
- Low Distortion
- Small Hermetically Sealed Package (V1B/V1D/VU/VF)
- Low Cost Surface Mount Package (ZV/ZB/V1B/V1D/VU/YD)



◆Power Amplifier MMIC Lineup (Package)



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.)	Outline/Package Code	Function/Application
EMM5078ZV	3.4–8.5	26	29	35	6	350	ZV	Driver Amp., LO Buffer Amp. C-Band VSAT and Radio Link
EMM5077VU	3.4–5.0	31 (f=3.4–4.2GHz) 29.5 (f=4.2–5.0GHz)	25	39.5 (f=3.4–4.2GHz) 38 (f=4.2–5.0GHz)	6	1200 (f=3.4–4.2GHz) 1250 (f=4.2–5.0GHz)	VU	Power Amp. Radio Link
EMM5074VU	5.8–8.5	32 (f=5.8–7.1GHz) 33 (f=7.1–8.5GHz)	26	41	6	1400 (f=5.8–7.1GHz) 1450 (f=7.1–8.5GHz)	VU	Power Amp. C-Band VSAT and Radio Link
FMM5056VF	5.8–7.2	34	28	-	10	1100	VF	
EMM5057VF	7.1–8.5	34	26	-	10	1100	VF	
EMM5068VU	9.5–13.3	33 (f=9.5–11.7GHz) 31 (f=11.7–13.3GHz)	25 (f=9.5–11.7GHz) 23 (f=11.7–13.3GHz)	40	6	1500 (f=9.5–11.7GHz) 1400 (f=11.7–13.3GHz)	VU	Power Amp. Radio Link
FMM5061VF	9.5–13.3	33 (f=9.5–11.7GHz) 31 (f=11.7–13.3GHz)	26 (f=9.5–11.7GHz) 24 (f=11.7–13.3GHz)	41.5	6	1700 (f=9.5–11.7GHz) 1500 (f=11.7–13.3GHz)	VF	
EMM5079ZB	10–15.4	25.5 (f=10–11.7GHz) 24 (f=11.7–15.4GHz)	22	31 (f=10–11.7GHz) 35 (f=11.7–15.4GHz)	6	380	ZB	Driver Amp., LO Buffer Amp. Ku-Band VSAT and Radio Link
EMM5075VU	12.7–15.4	33	25	42	6	1500	VU	Power Amp. Ku-Band VSAT and Radio Link
EMM5081V1B	13.75–14.5	33.5	29	39.5	6	1400	V1B	
FMM5059VU	13.75–14.5	33.5	29	39.5	6	1400	VU	Power Amp. Ku-Band VSAT
FMM5059VF	13.75–14.5	35	28	40	7	1600	VF	
FMM5804YD	17.5–26.5	24.5	16	-	6	350	YD	Driver Amp. Ka-Band VSAT and Radio Link
FMM5822VU	17.7–19.7	32	21	38.5	6	1100	VU	
EMM5836V1B/001	17.7–19.7	32.5	22	40	6	1800	V1B	
SMM5845V1B	21.2–23.6	33	21	41	6	1800	V1B	Power Amp. Radio Link
EMM5832VU	21.2–26.5	31	19	36.5	6	1000	VU	
SMM5846V1D*	27.5–29.5	31	19	39	6	1450	V1D	
EMM5841V1B	29.5–30.0	30	14	-	6	850	V1B	Power Amp. Ka-Band VSAT

G.C.P.: Gain Compression Point

*Under Development