MITSUBISHI ELECTRIC
SEMICONDUCTORS

GaAs Devices

The best solution for realizing the information era.

Communication networks, such as high speed Internet, video-on-demand and high-speed data communcation, are developing rapidly.
Mitsubishi is ready to offer the best solution to the systems for realizing the information era by providing a variety of GaAs products designed for satellite communication systems to base stations and cellular handset applications.

GaAs FET Series for Microwave- Band Low-Noise Amplifiers

Type Number	Noise Figure(dB)		Associated Gain(dB)		Frequency (GHz)	Drain-Source Voltage(V)	Drain Current (mA)	Package Outline
	Typ	Max.	Min.	Typ.				
MGF1403B*	1.8	-	-	10.5	12	3	10	GD-9
MGF1907A	2.7	-	-	9	12	3	10	GD-16
MGF1908A	2	-	-	10.5	12	3	10	GD-16
MGF4941AL*	0.35	0.50	12.0	13.5	12	2	10	GD-32
MGF4953A	0.40	0.50	12.0	13.0	12	2	10	GD-27
MGF4931AM	0.60	0.80	10.0	11.5	12	2	7.5	GD-30
MGF4934AM	0.55	0.80	11.5	12.5	12	2	10	GD-30
MGF4953B	0.55	0.80	9.0	10.5	20	2	10	GD-27
MGF4961B*	0.70	0.95	11.5	13.5	20	2	10	GD-31

GaAs FET Series for Microwave- Band High-Power Amplifiers (Discrete Devices)

Type Number	Output Power at 1dB Gain Compression(dBm)		Output Power (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
	Min.	Typ.			Min.	Typ.					Min.	Typ.	
MGF0907B	38.5	40	-	8	-	-	37	2.3	10	2.4	-	4	GF-21
MGF0909A	37	38	-	10	-	-	45	2.3	10	1.3	-	-	GF-7
MGF0910A	37	38	-	10	-	-	37	2.3	10	1.3	-	6	GF-21
MGF0911A	40	41	-	10	-	-	40	2.3	10	2.6	-	4.5	GF-21
MGF0913A	-	-	29.5	11	-	-	48	1.9	10	0.2	20	30	GF-50
MGF0915A	-	-	35	13	-	-	50	1.9	10	0.8	5	8	GF-50
MGF0918A	-	-	25	18	-	-	45	1.9	10	0.15	35	50	GF-50
MGF0920A	-	-	30	16	-	-	45	1.9	10	0.4	13	18	GF-50
MGF0921A	-	-	31	15	-	-	40	1.9	10	0.5	11	15	GF-50
MGF0951P	-	-	31	11	-		50	2.15	10	0.2	20	25	GF-55
MGF0952P	-	-	36.5	11	-	-42	50	2.15	10	0.7	5	6	GF-55
MGF0953P	-	-	28	18	-	-42	40	2.15	10	0.15	14	20	GF-55
MGF1451A**	11	13	-	10.5	-	-	-	12	3	0.03	-	-	GD-4
MGF1951A	11	13	-	7	-	-	-	12	3	0.03	-	-	GD-27
MGF1952A	15	17	-	5	-	-	-	12	3	0.06	-	-	GD-27
MGF1953A	18	20	-	4	-	-	-	12	4	0.1	-	-	GD-27
MGF1954A	21	23	-	3	-	-	-	12	6	0.1	-	-	GD-27
MGF2407A	23	24.5	-	7	-	-	30	14.5	10	0.075	-	100	GF-17
MGF2415A	26	27.5	-	6.5	-	-	29	14.5	10	0.15	-	60	GF-17
MGF2430A	29	30.5	-	5.5	-	-	27	14.5	10	0.3	-	30	GF-17
MGF2445A	31	32	-	5.5	-	-	20	12	10	0.45	-	15	GF-17
MGF4851A	12	14.5	-	9	-	-	-	12	2.5	0.025	-	-	GD-27

Internally Matched GaAs FET Series for WiMAX Base Station

Type Number	Output Power at 1dB Gain Compression(dBm)		Output Power (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
	Min.	Typ.			Min.	Typ.					Min.	Typ.	
MGFC36V3436	35	37	-	11	-42	-45	32	3.4~3.6	10	1.2	5	6	GF-8
MGFC39V3436	38	39.5	-	10	-42	-45	32	3.4~3.6	10	2.4	3	3.5	GF-8
MGFC42V3436	41.5	42.5	-	12	-42	-45	37	3.4~3.6	10	4.5	-	1.9	GF-18
MGFC45B3436B*	-	-	45	11	-	-45	-	3.4~3.6	12	0.8	-	1.9	GF-60
MGFS45B2527B**	-	-	45	12	-	-45	-	2.5~2.7	12	0.9	-	1.9	GF-60
MGFC47B3436B**	-	-	47	10.5	-	-45	-	3.4~3.6	12	1.5	-	1.2	GF-60

*: Industrial Grade **: Under Development Ta=25°C

*: New product