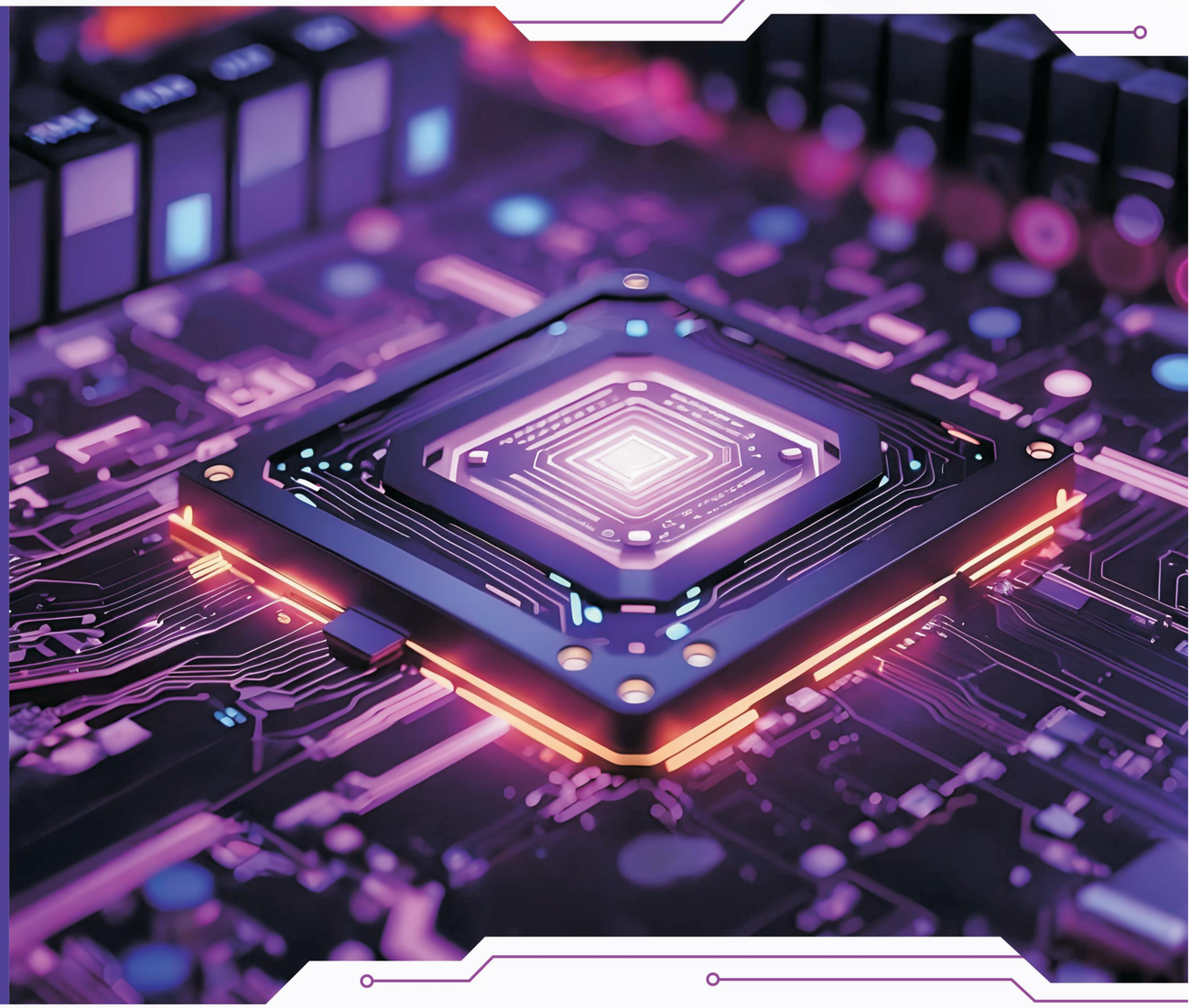
Advance RF



Advance RF Brochure

Advance RF PTE. LTD.

Tel : +49 (0)906120 22200
E-mail : verkauf@tech-inter.eu
Website : www.tech-inter.de
Adress : GERMANY /HOLLAND /SWITZERLAND(Ge) :
Birkenstrasse 5
86609 Donauwöerth (DEUTSCHLAND)

Overview

Advance RF(ARF) is a national-level high-tech enterprise in Singapore that integrates chip design, module production and RF system, Phased array with Si RF, GaAs and GaN process with frequency from DC-100GHz.

Its products are widely used in fields such as Wireless Infrastructure, Automotive, Satellite COMM, Industrial, Test and Measurement and Airplane.

ARF R&D center is located at Singapore headquarter, with more than 100 R&D engineers. Core R&D team consists of experienced engineers and industry experts who possess profound professional knowledge and practical experience in RF and Microwave technology. R&D capabilities cover the entire industry chain process, from chip design, process technology, manufacturing, reliability,to circuit-level and system-level applications.

ARF also has an assembly factory in Vietnam with an area of 1,200 square meters.

ARF are committed to technological innovation and market expansion, striving to become a leader in the industry, and providing global customers with high-performance and high- reliability RF and Microwave chips and solutions.

Laboratory

Component Verification

RF Application

Reliability Platform

Packaging

ATE

ARF has a top - notch anti - static cleanroom lab with over 20 sets of advanced testing equipment, including DB, WB, probe stations, and multiple reliability testing devices for HTRB, HTGB, HAST, and HTOL. This enables ARF to handle wafer testing, chip packaging, internal matching, RF applications, and ATE testing.

Factory

ARF has an assembly factory in Vietnam with an area of 1,200 square meters.

GaN Transistor

50V GaN Transistor

Model	Description	Freq (GHz)	Test Point (GHz)	Pout (W)	Linear Gain (dB)	Eff (%)	VDD (V)	Package
ARF1001	8W,50V,DC-6GHz GaN Transistor	DC ~ 6.0	1.0GHz	10	20	68	50	DFN 4*4.5
ARF1002	20W,50V,DC-3.8GHz GaN Transistor	DC ~ 3.8	2.6GHz	25	19	74	50	DFN 4*4.5
ARF1051	20W,50V,DC-6GHz GaN Transistor	DC ~ 6.0	2.6GHz	20	18	67	50	Ceramic
ARF1042	40W,50V,DC-6GHz GaN Transistor	DC ~ 6.0	3.6GHz	40	17	67	50	Ceramic
ARF1052	50W,50V,DC-6GHz GaN Transistor	DC ~ 6.0	3.6GHz	60	16	63	50	Ceramic
ARF1054	85W,50V,DC-6GHz GaN Transistor	DC ~ 6.0	3.6GHz	85	16	63	50	Ceramic
ARF1055	100W,50V,DC-6GHz GaN Transistor	DC ~ 6.0	0.1GHz	100	23	78	50	Ceramic
ARF1104	160W,50V,DC-2.5GHz GaN ransistor	DC ~ 2.5	2.5GHz	160	20	75	50	Ceramic
ARF1107	1600W,50V,DC-1.4GHz GaN ransistor	DC ~ 1.4	1.0GHz	1600	22	74	50	Ceramic

28V GaN Transistor

Model	Description	Freq (GHz)	Test Point (GHz)	Pout (W)	Linear Gain (dB)	Eff (%)	VDD (V)	Package
ARF1113	15W,28V,DC-6GHz GaN Transistor	DC ~ 6.0	4	15	16	73	28	Ceramic
ARF1122	25W,28V,DC-6GHz GaN Transistor	DC ~ 6.0	2.5	25	18.5	81	28	Ceramic
ARF1142	40W,28V,DC-6GHz GaN Transistor	DC ~ 6.0	3.6	45	14	66	28	Ceramic
ARF1084	60W,28V,DC-6GHz GaN Transistor	DC ~ 6.0	0.5	60	23.3	67	28	Ceramic
ARF1143	100W, 28V, 5-6GHz GaN Transistor	5.0 ~ 6.0	6	100	13.7	55	28	Ceramic
ARF1085	120W,28V,DC-3GHz GaN Transistor	DC ~ 3	1.9	120	18.5	60	28	Ceramic
ARF1096	120W, 28V, 4.4-5GHz GaN Transistor	4.4 ~ 5.0	5	125	15	55	28	Ceramic
ARF1103	180W,28V,DC-2.5GHz GaN Transistor	DC ~ 2.5	1	180	20	65	28	Ceramic

28V/50V GaN IMFET Transistor

Model	Description	Freq (GHz)	Test Point (GHz)	Pout (W)	Linear Gain (dB)	Eff (%)	VDD (V)	Package
ARF1501	IMFET	0.4~2.7	1.6	20	12	47	28	Ceramic
ARF1505	IMFET	0.5~1.2	0.8	46	12.8	58	50	Ceramic
ARF1527	IMFET	1~1.1	1.1	30	35	55	28	Ceramic
ARF1512	IMFET	1.1~2.0	1.5	25	32.5	45	28	Ceramic
ARF1518	IMFET	1.3~1.9	1.65	50	16.5	60	28	Ceramic
ARF1502	IMFET	1.7~2.13	1.9	5	12	50	28	Ceramic
ARF1503	IMFET	1.7~2.13	1.9	70	21.5	53.8	28	Ceramic
ARF1521	IMFET	2.0~6.0	4	50	9	37	28	Ceramic
ARF1504	IMFET	2.3~3.5	3.1	125	14.1	56.2	28	Ceramic
ARF1110	IMFET	2.7~3.1	2.9	215	12.3	60	32	Ceramic
ARF1523	IMFET	2.7~3.2	2.9	50	27	45	28	Ceramic
ARF1515	IMFET	2.7~3.5	3.1	400	13.6	53.1	50	Ceramic
ARF1514	IMFET	2.7~3.5	3.1	200	13.6	53.5	50	Ceramic

GaN Transistor

28V/50V GaN IMFET Transistor

Model	Description	Freq (GHz)	Test Point (GHz)	Pout (W)	Linear Gain (dB)	Eff (%)	VDD (V)	Package
ARF1516	IMFET	2.7~3.5	3.1	102	14.1	57.4	50	Ceramic
ARF1517	IMFET	2.7~3.5	3.1	223	13.4	58.6	32	Ceramic
ARF1511	IMFET	5.0~6.0	5.5	110	10	55	28	Ceramic
ARF1524	IMFET	5.0~6.0	5.5	40	12	55	28	Ceramic
ARF1526	IMFET	5.0~6.0	5.5	120	12.5	50	28	Ceramic
ARF1530	IMFET	5.0~5.3	5.2	50	30	52	28	Ceramic
ARF1531	IMFET	5.7~5.9	5.8	50	29	48	28	Ceramic

GaN Transistor Demo

GaN Transistor Demo

Part Number	Freq (GHz)	Test Point (GHz)	Pout (W)	Eff (%)	Linear Gain (dB)	VDD (V)
ARF1004-demo4	1.6~2	1.8	10	55.7	18.2	24
ARF1091-demo2	1.61~2.01	1.81	42	72.5	16.2	24
ARF1046-demo3	0.068	0.07	25	66.6	18.7	28
ARF1055-demo4	0.068	0.07	34	72	19	28
ARF1103-demo3	0.03~0.512	0.45	223	72	25	28
ARF1103-demo4	0.03~0.678	0.45	202	70.5	20.2	28
ARF1004-demo	0.03~3	1.3	16	58.4	14	28
ARF1004-demo5	0.03~3	2	16	57	15	28
ARF1005-demo2	0.03~3.5	1.7	5	54	12.7	28
ARF1084-demo	0.1~0.5	0.3	59	58	20.9	28
ARF1127-demo	0.1~0.5	0.3	80	66	36	28
ARF1003-demo2	0.1~0.52	0.4	13	81	20.1	28
ARF1140-demo2	0.1~0.6	0.4	263	60.4	17.2	28
ARF1004-demo2	0.225~0.7	0.4	16	66.4	14.7	28
ARF1003-demo	0.3~1.5	0.7	12	65	18	28
ARF1114-demo	0.38~2	1.2	19	56	13.6	28
ARF1091-demo3	0.38~2	1.2	76	69.6	15.5	28
ARF1085-demo	0.38~2	1.2	88	65	13.2	28
ARF1085-demo5	0.38~2	1.2	140	51	26	28
ARF1085-demo4	0.38~2	1.2	143	63.5	14.8	28
ARF1085-demo2	0.38~2	1.2	165	41.8	14	28
ARF1085-demo9	0.4~0.5	0.46	109	57	11	28
ARF1501-demo	0.4~2.7	1.6	20	47	12	28
ARF1086-demo3	0.4~3	1.6	23	37	12.7	28
ARF1005-demo3	0.5~1.3	0.9	5	57	12.7	28

GaN Transistor Demo

GaN Transistor Demo

Part Number	Freq (GHz)	Test Point (GHz)	Pout (W)	Eff (%)	Linear Gain (dB)	VDD (V)
ARF1085-demo6	0.5~2.5	1.5	88	54	11.2	28
ARF1001-demo6	0.6~0.9	0.75	6	68.6	18.8	28
ARF1135-demo	0.7~1.23	1.1	508	53	17.1	28
ARF1103-demo	0.9~1.1	1	203	65	20.8	28
ARF1009-demo	0.9~2.7	1.9	20	51	12.9	28
ARF1091-demo4	1.1~1.7	1.5	65.9	60	16	28
ARF1004-demo3	1.3~1.8	1.6	15	54.1	16.3	28
ARF1518-demo	1.3~1.9	1.65	50	65	16.2	28
ARF1004-demo7	1.4~1.6	1.5	4	54	18	28
ARF1093-demo2	1.4~2.4	2	30	66.5	14	28
ARF1091-demo5	1.477~1.525	1.5	60	65	19	28
ARF1090-demo	1.61~1.63	1.62	2	68.6	20.4	28
ARF1118-demo	1.61~1.63	1.62	27	77	21	28
ARF1502-demo	1.7~2	1.9	5	50.5	12.3	28
ARF1503-demo	1.7~2	1.9	70	53.8	21.5	28
ARF1085-demo7	1.8~1.92	1.86	107	60	14.9	28
ARF1094-demo	1.8~2.7	2.3	45	59	14.3	28
ARF1091-demo	1~2	1.6	50	72	15.8	28
ARF1091-demo6	1~2	1.6	53	60	13	28
ARF1086-demo	1~3	2	47	62	16.5	28
ARF1093-demo	1~4	2.4	31	63	12.5	28
ARF1004-demo8	2.1~2.2	2.1	17	67	14	28
ARF1040-demo	2.2~2.3	2.26	5	55.5	17.4	28
ARF1134-demo	2.3~2.5	2.4	70	73.1	13.8	28
ARF1504-demo	2.3~3.5	2.9	120	54	12.1	28
ARF1081-demo	2.4~2.5	2.45	15	81	19.3	28
ARF1517-demo	2.7~3.5	3.1	200	51	12	28
ARF1001-demo10	2~2.2	2.1	4.6	56	17	28
ARF1086-demo2	2~2.2	2.1	52	68	19	28
ARF1004-demo6	2~2.4	2.2	10	64	16.9	28
ARF1085-demo8	2~2.7	2.4	84	53	13	28
ARF1521-demo	2~6	4	55	37	12	28
ARF1113-demo	3.1~3.5	3.3	17	75	16	28
ARF1002-demo	3.3~3.6	3.5	10	62.1	15.1	28
ARF1087-demo	3.3~3.6	3.5	115	55	13.4	28
ARF1149-demo	3.3~3.7	3.5	77.5	57.6	11.8	28
ARF1113-demo4	3.4~3.6	3.5	18	65.4	15.2	28
ARF1095-demo	3.4~3.6	3.5	46	68.1	16.8	28
ARF1012-demo2	3.5~3.7	3.6	32	68.7	12	28
ARF1006-demo5	3.5~5	4.5	5.4	51	13.5	28

GaN Transistor Demo

GaN Transistor Demo

Part Number	Freq (GHz)	Test Point (GHz)	Pout (W)	Eff (%)	Linear Gain (dB)	VDD (V)
ARF1081-demo2	3.6~3.9	3.7	16.7	68.4	12.2	28
ARF1123-demo	3.7~4.2	3.9	25	69	14.3	28
ARF1113-demo3	3.7~4.25	4	14	72.5	15.7	28
ARF1001-demo9	3.7~4.35	4	5	52	14.3	28
ARF1006-demo4	3.7~5	4.3	5.7	53	12.4	28
ARF1088-demo	3~4	3.6	46	44.7	13	28
ARF1096-demo	4.4~5	4.7	125	56	14.7	28
ARF1124-demo	4.8~4.96	4.9	53	55	11	28
ARF1119-demo2	4.9~6.1	5.5	79	50	11	28
ARF1089-demo2	5.1~5.9	5.5	19	54	14.8	28
ARF1089-demo	5.72~5.85	5.8	23	65	14.8	28
ARF1001-demo5	5~5.2	5.1	3	60	14	28
ARF1097-demo	5~5.3	5.15	34	55.9	15.3	28
ARF1083-demo	5~6	5.6	35	55.6	13.7	28
ARF1119-demo	5~6	5.5	100	56	15.2	28
ARF1098-demo	5~6	5.5	107	56.8	14	28
ARF1707-demo	5~6	5.5	126	56	9.9	28
ARF1092-demo	0.7~6	3.4	22	36	8.4	32
ARF1517-demo2	2.7~3.5	3.1	200	58.6	16.4	32
ARF1046-demo5	0.617~0.767	0.72	72	70	25.8	48
ARF1046-demo4	0.86~0.9	0.88	59	73.8	23	48
ARF1010-demo	2.4~2.5	2.45	22	73.6	19.8	48
ARF1055-demo	0.03~0.088	0.05	91	91.7	18.5	50
ARF1055-demo3	0.03~0.512	0.2	74	78.2	20.6	50
ARF1055-demo2	0.03~0.512	0.25	84	71.7	22.8	50
ARF1051-demo2	0.03~1	0.5	30	59.2	20	50
ARF1007-demo3	0.136~0.47	0.4	37	80	18.5	50
ARF1007-demo	0.3~1.2	0.4	46	61.2	17.7	50
ARF1008-demo	0.3~3	1.3	29	52.9	13.2	50
ARF1505-demo	0.5~1.2	0.8	46	58	12.8	50
ARF1008-demo2	0.5~2.5	1.3	27	46.8	12.4	50
ARF1136-demo	0.595~0.605	0.6	1650	64	21.9	50
ARF1001-demo2	0.6~0.9	0.75	9	48.7	18.6	50
ARF1133-demo	0.668~1.5	1	1030	50	17.3	50
ARF1137-demo	0.668~1.523	1.03	296	30.5	34.7	50
ARF1107-demo21	0.668~1.523	1.03	1030	60	16.8	50
ARF1008-demo3	0.7~3	1.8	30	52.5	12	50
ARF1007-demo4	0.75~0.97	0.86	67	75	18.6	50
ARF1001-demo8	0.95~1.25	1.15	10	68	20.3	50
ARF1107-demo20	0.957~1.23	1.15	1549	61.3	18.9	50

GaN Transistor Demo

GaN Transistor Demo

Part Number	Freq (GHz)	Test Point (GHz)	Pout (W)	Eff (%)	Linear Gain (dB)	VDD (V)
ARF1107-demo11	0.957~1.23	1.15	1698	63	22.8	50
ARF1513-demo	0.99~1.13	1.05	2138	51	14.3	50
ARF1105-demo	1.35~1.518	1.43	209	73.5	21.3	50
ARF1105-demo2	1.625~1.785	1.71	222	75.2	22.8	50
ARF1001-demo4	1.93~2.2	2.1	8	55.4	21.8	50
ARF1046-demo2	1.93~2.2	2.1	70	66	20.5	50
ARF1104-demo	2.4~2.5	2.45	201	74.9	20.3	50
ARF1132-demo	2.4~2.9	2.7	542	50	19	50
ARF1516-demo	2.7~3.5	3.1	102	59.6	18.4	50
ARF1515-demo	2.7~3.5	3.1	400	53.1	13.6	50
ARF1001-demo7	2.95~3.05	3	12	52.4	17.3	50
ARF1131-demo	2.95~3.05	3	536	58	30.6	50
ARF1146-demo	3.1~3.4	3.2	60	60.1	19	50
ARF1147-demo	5.2~5.9	5.5	67	46.2	15	50
ARF1055-demo5	0.03~0.088	0.06	107	67.5	22.3	75

GaN MMIC PA

GaN Switch PA

Model	Type	Freq (GHz)	Small-signal gain (dB)	Psat (dBm)	PAE (%)	Dynamic current (A)	Power Gain (dB)	VDD (V)	Package
ARF8046	GaN Switch PA	7~13	36	35.4	40	0.3	23.2	28	Di e
ARF8047	GaN Switch PA	7~13	36	35.6	40	0.319	23.7	28	Di e
ARF8016	GaN Switch PA	8~12	3 2	38	4 0	0.65	24	28	Die
ARF8025	GaN Switch PA	8~12	3 2	38	3 7	0.68	23	28	Die
ARF8009	GaN Switch PA	14~18	3 1	35	3 3	0.37	22	24	Die
ARF8030	GaN Switch PA	32~36	31	3553	34	0.4	16.3	24	Die

GaN PA

Model	Type	Freq (GHz)	Small-signal gain (dB)	Psat (dBm)	Power Gain (dB)	PAE (%)	VDD (V)	Dynamic current (A)	Package
ARF8099	GaN PA	2~6	27	42	22	42	28	1.3	Di e
ARF8102	GaN PA	2~6	25	41.5	18	38	28	1.3	QFN24
ARF8098	GaN PA	2.5~6.2	28	46.2	21	45	28	3	Di e
ARF8042	GaN PA	2.7~3.5	-7	40	22.5	61	28	0.68	Di e
ARF8131	GaN PA	2.7~3.5	4.8	44	23	60	28	1.5	Di e
ARF8001	GaN PA	4~8	25	46.5	15.5	45	28	3.6	Di e
ARF8015	GaN PA	5-6	28.5	50.6	20.6	58.5	32	6.3	CQFN
ARF8072	GaN PA	5~7	30	46.5	21	53	28	2.9	Di e

GaN MMIC PA

GaN PA

Model	Type	Freq (GHz)	Small-signal gain (dB)	Psat (dBm)	Power Gain (dB)	PAE (%)	VDD (V)	Dynamic current (A)	Package
ARF8073	GaN PA	5~7	29.5	46.3	20	50	28	2.8	Di e
ARF8127	GaN PA	5~7	29	46	23	49	28	2.9	Di e
ARF8056	GaN PA	5~18	30	36.5	17.5	27	28	0.62	Di e
ARF8014D	GaN PA	5.3~5.8	28.5	50.6	20.6	58.5	32	6.3	Di e
ARF8078	GaN PA	5.3~5.8	37	/	/	52	28	/	Di e
ARF8004	GaN PA	6~18	28	42.5	16.5	22	28	3	Di e
ARF8005	GaN PA	6~18	28	43	17	25	28	3.5	Di e
ARF8128	GaN PA	7~13	34	45.2	23.2	43	28	2.74	Di e
ARF8129	GaN PA	7~13	36	45.5	21	43	28	2.97	Di e
ARF8051	GaN PA	7~13	37	35	23	36	28	0.3	Di e
ARF8050	GaN PA	7~13	37	35	23	36	28	0.3	Di e
ARF8053	GaN PA	8~12	36	41.3	23.3	46	28	1.05	Di e
ARF8052	GaN PA	8~12	37	41.6	23.6	46	28	1.15	Di e
ARF8055	GaN PA	8~12	37	41.5	23.5	46	28	1.1	Di e
ARF8048	GaN PA	8~12	28.9	35	22.1	40.9	28	0.3	Di e
ARF8007	GaN PA	8~16	30	44.5	19.5	32	28	3.2	Di e
ARF8008	GaN PA	8~16	30	45	18	35	28	3	Cerami c
ARF8034	GaN PA	12.8~13.8	32.3	42	22	51	24	1.4	Di e
ARF8111	GaN PA	13~15	30	46.7	25	45	28	4.5	Di e
ARF8112	GaN PA	13~15	28.3	47	25	40	28	4.5	Di e
ARF8024	GaN PA	14~18	25	44	16	37	28	2.6	Di e
ARF8023	GaN PA	14~18	30	45.5	22.5	39	24	3.8	Di e
ARF8065	GaN PA	14~18	33	48.5	22	35	28	/	Di e
ARF8071	GaN PA	15~18	31	47.2	20.2	34	28	5	Di e
ARF8074	GaN PA	27~31	20	40	19	27	28	1.4	Di e
ARF8075	GaN PA	27~31	18	41	19	26	24	2	Di e
ARF8033	GaN PA	32~36	28	34.5	18.5	27	24	0.48	Di e

GaN Driver

Model	Type	Freq (GHz)	Small-signal gain (dB)	Psat (dBm)	PAE (%)	Power Gain (dB)	Dynamic current (mA)	VDD (V)	Package
ARF8002	GaN Dri ver	5~9	24	33	35	17	180	32	Di e
ARF8003	GaN Dri ver	5~9	22	36	38	20	300	32	Di e
ARF5057	GaN Dri ver	5~9	20	32	/	/	40	32	Cerami c
ARF8118	GaN Dri ver	5~18	12	29	/	10	120	28	Di e
ARF81 91	GaN Driver	5~18	18	29	/	1 2	160	28	Die
ARF80 01	GaN Driver	6~18	9.5	26.5	/	1 8	115	28	Die
ARF80 91	GaN Driver	7~13	27	28	27.5	1 8	75	28	Die
ARF81 03	GaN Driver	7~13	-32	26.6	18	11. 4	85	28	Die

GaN MMIC PA

GaN Driver

Model	Type	Freq (GHz)	Small-signal gain (dB)	Psat (dBm)	PAE (%)	Power Gain (dB)	Dynamic current (mA)	VDD (V)	Package
ARF8018	GaN Driver	7~13	25	28	28	18	80	28	Die
ARF0445	GaN Driver	8~12	14	29	/	/	190	28	Die
ARF8021	GaN Driver	14~18	22	30	/	20	120	28	Die
ARF8113	GaN Driver	14~18	22	30	/	20	120	28	Die
ARF8022	GaN Driver	14~18	24	30.5	32	21	110	28	Die
ARF8012	GaN Driver	14~18	22.3	28.8	20	19	90	40	Die
ARF8013	GaN Driver	14~18	25	30.2	24	20	110	40	Die
ARF8100	GaN Driver	14~18	-15.5	29.1	21	10.5	120	28	Die
ARF8115	GaN Driver	14~18	-30	28.7	30.5	13.7	84	28	Die
ARF8116	GaN Driver	14~18	-14.4	26.1	20	14.5	85	24	Die
ARF8028	GaN Driver	32~36	18	20	6.5	16	40	28	Die
ARF8032	GaN Driver	32~36	-4	20	/	5.5	40	24	Die
ARF8031	GaN Driver	32~36	-14	27	/	12	120	24	Die

GaAs PA & GaAs Driver

GaAs Driver

Model	Type	Freq (GHz)	Gain (dB)	OP1dB (dBm)	OIP3 (dBm)	Vdd /Idd (V/mA)	Package
ARF9100	GaAs Driver	DC~3.5	17	15	/	5/65	Die
ARF2018	GaAs Driver	DC~4	16.5	18.5	32	5/90	Die
ARF9123	GaAs Driver	0.05~2	12	22.2	30.5	5/121	Die
ARF2104	GaAs Driver	0.3~0.9	29	20	/	5/85	Die
ARF8110	GaAs Driver	0.45~0.65	23.5	28.5	/	5/120	QFN
ARF2102	GaAs Driver	2~4.2	36.5	27	/	5/110	QFN
ARF9113	GaAs Driver	2~18	21.6	16.1	/	5/73	Die
ARF2109	GaAs Driver	5~20	22	21	28	5/127	QFN
ARF2109D	GaAs Driver	5~20	22	21	29	5/133	Die
ARF9109	GaAs Driver	7~13	6	9.8	/	2.5/25	Die
ARF9114	GaAs Driver	18~40	10.9	16.3	/	5/42	Die

GaAs PA

Model	Type	Freq (GHz)	Gain (dB)	Psat (dBm)	IMD3 (dBc)	Vdd /Idd (V/mA)	PAE (%)	Package
ARF9001	GaAs PA	12~16	27	32	<-50	6/1380	/	QFN
ARF9124	GaAs PA	12~16	27	34	<-49	6/1260	/	QFN
ARF9002	GaAs PA	17~20	27	35	<-45	6/1600	/	QFN
ARF9002D	GaAs PA	17~20	27	35	<-45	6/1600	/	Die
ARF9103	GaAs PA	17~21	17	24	-27	5/173	40	Di e
ARF9005	GaAs PA	17~23.5	26	27	-26	5/210	35	Di e
ARF9003	GaAs PA	20~25	25	33.5	<-47	6/1500	/	AQFN
ARF9007D	GaAs PA	30~38	24	31.5	/	6/560	34	Die
ARF9007	GaAs PA	33~37	22	31	/	6/690	30	QFN

GaAs PA & GaAs Driver

GaAs Bilateral Amplifier

Model	Type	Freq (GHz)	RX / TX Gain (dB)	RX / TX P1dB (dBm)	Vdd /RX、TX Idd (V/mA)	Package
ARF9121	GaAs Bilateral amplifier	5~7	10/18	12.5/12.5	4.5/34、29	Die
ARF9141	GaAs Bilateral amplifier	8~12	9/15.5	14.8/13.7	4.5/42、53	Die
ARF9142	GaAs Bilateral amplifier	8~12	9/15	14.9/15	4.5/42、52	Die
ARF9143	GaAs Bilateral amplifier	8~12	7.5/10.8	15.7/13.7	4.5/40、41	Die
ARF5005	GaAs Bilateral amplifier	8~12	2.3/14.5	22/21	4.5/150、150	Ceramic
ARF9140	GaAs Bilateral amplifier	7~13	7.7/11.4	15.0/14.2	4.5/41、41	Die
ARF9101	GaAs Bilateral amplifier	7~13	6/11.8	21/21	5/107、116	Die
ARF9110	GaAs Bilateral amplifier	7~13	6/10	20.5/21	5/122、127	Die
ARF9118	GaAs Bilateral amplifier	7~13	7/15	23/22	4.5/156、189	Die

GaAs LNA &Limiter& FEM

GaAs LNA

Model	Type	Freq (GHz)	Gain (dB)	NF (dB)	OP1dB (dBm)	Vdd /Idd (V/mA)	Package
ARF2001	GaAs LNA	0.01~5	22	0.7	22	5/68	DFN
ARF0400	GaAs LNA	0.1~6	23	1.5	21	5/75	SOT89
ARF0401	GaAs LNA	0.1~6	23	1.5	21	5/75	Die
ARF2069	GaAs LNA	0.5~0.7	24.5	0.55	22	5/83	QFN
ARF0402	GaAs LNA	0.5~4	18.6	1.6	22.5	5/104	SOT89
ARF0403	GaAs LNA	0.5~4	18.6	1.6	22.5	5/104	Die
ARF0519	GaAs LNA	0.5 ~ 5	23	0.58	18	3.3/76	DFN
ARF2002	GaAs LNA	0.5~6	22	0.68	22.5	5/70	DFN
ARF2065	GaAs LNA	0.5~6	22	0.7	22	5/70	DFN
ARF2003	GaAs LNA	1.5~2.3	22	0.6	25	5/110	QFN
ARF2050	GaAs LNA	1.5~3.7	22.5	0.57	2.1	5/11	Ceramic
ARF2013	GaAs LNA	2~4	32.8	0.35	19	4.5/91	QFN
ARF2025	GaAs LNA	2~4	33.5	0.4	21	5/109	Die
ARF2026	GaAs LNA	2~4	32	0.4	19.5	5/95	Die
ARF0404	GaAs LNA	2~4	28	1.1	8.7	5/39	Die
ARF2005	GaAs LNA	2~20	17	1.5	14.5	5/68	Die
ARF2037	GaAs LNA	2.7~3.5	32	0.4	10.6	5/29	Die
ARF2004	GaAs LNA	2~18	26.3	1.25	9.2	5/59	Die
ARF2061	GaAs LNA	5~7	28.8	0.47	4.5	2.5/27	Die
ARF2017	GaAs LNA	5~6	26	0.6	15	5/27	Die
ARF2035	GaAs LNA	5~18	28.5	1	21	4.5/105	Die
ARF2036	GaAs LNA	5~18	29	1.1	19.5	4.5/98	Die
ARF2009	GaAs LNA	5.9~8.5	15	1.14	14.9	5/16	DFN
ARF2014	GaAs LNA	7~13	28	0.7	4	3.3/12	Die

GaAs LNA &Limiter& FEM

GaAs LNA

Model	Type	Freq (GHz)	Gain (dB)	NF (dB)	OP1dB (dBm)	Vdd /Idd (V/mA)	Package
ARF2029	GaAs LNA	8~12	29.5	0.6	7	4.5/25	Die
ARF0406	GaAs LNA	8~12	30	1	8	5/26	Die
ARF0520	GaAs LNA	8 ~ 12	30	1	8	5/26	Die
ARF2006	GaAs LNA	12~18	27.5	0.7	2	3.3/11	Die
ARF2075	GaAs LNA	14~18	28	1.5	5.8	3.3/25	Die
ARF2007	GaAs LNA	14~18	31	0.8	5.5	5/13	Die
ARF2008	GaAs LNA	17~22	27.8	1.03	7.5	5/15	CQFN
ARF2010	GaAs LNA	17~22	28.5	0.9	6.3	5/15	Die
ARF2011	GaAs LNA	32~38	32	1.7	2	3.3/13.5	Die

Limiter LNA

Model	Type	Freq (GHz)	Gain (dB)	NF (dB)	P1dB (dBm)	Vdd /Idd (V/mA)	Power endurance	Package
ARF2038	Limiter LNA	2.7~3.5	30	0.9	12.5	5/49	20	Die
ARF2034	Limiter LNA	14~18	28	1.5	5.8	3.3/25	50	Die

GaAs Limiter

Model	Type	Freq (GHz)	Insertion loss (dB)	Power endurance (W)	Limiting level (dBm)	Package
ARF5062	GaAs Limiter	5~6	0.6	2	14	Ceramic
ARF2071	GaAs Limiter	5~14	0.25	10	16	Die
ARF2071-M	GaAs Limiter	5~14	0.25	10	16	Die
ARF2403	GaAs Limiter	5~18	0.9	30	15.5	Die
ARF2404	GaAs Limiter	5~18	1	30	16	Die
ARF2087	GaAs Limiter	12~18	0.3	5	14	Die
ARF2087-M	GaAs Limiter	12~18	0.3	5	14	Die
ARF2060	GaAs Limiter	14~18	1.1	30	/	Die
ARF2402	GaAs Limiter	32~38	0.35	10	15.5	Die

GaAs FEM

Model	Type	Freq (GHz)	Rx Gain (dB)	Rx NF (dB)	Rx P1dB (dBm)	Tx Psat (dBm)	Tx Power Gain (dB)	Tx FAE (%)	VDD (V)	Package
ARF4201	GaAs FEM	2.4~2.5	14	1.6	-1	21	33	/	5	QFN
ARF4501	GaAs FEM	5.15~5.85	14	2	2	18	31	/	5	QFN
ARF4906	GaAs FEM	14~18	27	2.4	3.5	32	23.7	41	5/3.3	Die
ARF4905	GaAs FEM	14~18	25	2.2	4	28	15.5	44	5/3.3	Die
ARF4904	GaAs FEM	24~25	25.5	2.2	5	23.7	19.5	42	5	Die
ARF4903	GaAs FEM	32~38	26	4	4	28	21.5	28	5	Die

Beamformer IC

Beamformer IC

Model	Description	Frequency (GHz)	TX Gain (dB)	RX Gain (dB)	OP1dB /Psat (dBm)	RX IP-1 (dBm)	RX NF (dB)	Phase shift bits	Attenuation bits	Process	Package
ARF0410	1T1R, Beamformer IC	2.7~3.5	33	27	-/29.5	-15	2.3	6	6	SOI	QFN68
ARF7041	1R, Beamformer IC	3.4~4.2	/	-8	/	/	/	6	5	GaAs	Die
ARF7042	1R, Beamformer IC	3.4~4.2	/	-8	/	/	/	6	5	GaAs	Die
ARF0451	1T1R, Beamformer IC	4.8~5	26	29	28/-	-12	2	6	6	GaAs	QFN48
ARF0411	4T4R, Beamformer IC	8~12	15	13.5	27/28.5	-24	2.8	6	6	SiGe	QFN76
ARF0454	4T4R, Beamformer IC	5~13	10	-1	20/-	0	13	6	6	SiGe	Die
ARF0455	4T4R, Beamformer IC, integrated with Power Modulation, Gate Voltage Drive	5~13	17	6	17/-	0	13	6	6	SiGe	Die
ARF7039	Single Channel Beamformer IC	7~13	21	9	23.5	6	9	6	6	GaAs	Die
ARF7040	Single Channel Beamformer IC	7~13	21	9	23.5	6	9	6	6	GaAs	Die
ARF0456	4T4R, Beamformer IC	7~13	5	5	/	-1	15	6	6	SiGe	Die
ARF0457	2T4R, Beamformer IC	8~12	10	0	/	3	10	6	6	GaAs+CMOS	Die
ARF0459	4T4R, Beamformer IC	8~12	17	23	27/28.5	-20	2.8	6	6	SiGe	QFN76
ARF0414	4T4R, Beamformer IC	14~18	14	4	14/-	1	12	6	6	SiGe	Die
ARF0413	4T4R, Beamformer IC	14~18	14	4	13.5/-	1	13	6	6	SiGe	QFN68
ARF0415	4T4R, Beamformer IC	15~18	16	15	22/24	-25	3.1	6	6	SiGe	QFN76
ARF0460	4T4R, Beamformer IC	15~18	17	16	23/25	-26	2.1	6	6	SiGe	Die
ARF7021	4-beam 16T, Beamformer IC	17~23.5	-3	/	6	/	/	6	4	SiGe	Die
ARF7024	4-beam 16R, Beamformer IC	25~31	/	16	/	-11	11	6	6	SiGe	Die
ARF0462	4T4R, Beamformer IC	32~38	-2	-3	5/8	-8	10	5	5	SiGe	Die
ARF0416	4T4R, Beamformer IC	32~38	25	23	20/21.5	-31	5.5	6	6	SiGe	Die
ARF0466	4T4R, Beamformer IC	32~38	27	25	21.5/23	-33	3.4	6	6	SiGe	Die

Power Modulation Chip

Power Modulation Chip

Model	Type	Description	voltage (V)	Maximum on-load current(A)	Rise time (ns)	Fall Time (ns)	Rise delay (ns)	Fall delay (ns)	Package
ARF3603	Power modulation chip	Dual-channel pressure modulation	12	A: 0.5 B: 2	16	18	25	50	Die
ARF3617	Power modulation chip	Single-channel pressure modulation	20~40	1.5	10	35	35	115	Die
ARF3616	Power modulation chip	Single-channel pressure modulation	20~40	1.3	/	/	12	120	Die
ARF3606	Power modulation chip	Dual-channel pressure modulation	5	0.3	/	/	20	35	Die
ARF3606-M	Power modulation chip	Dual-channel pressure modulation	5	0.3	/	/	20	35	Die
ARF3608	Power modulation chip	Dual-channel pressure modulation	5	0.5	/	/	20	35	Die

Power Modulation Chip

Power Modulation Chip

Model	Type	Description	voltage (V)	Maximum on-load current(A)	Rise time (ns)	Fall Time (ns)	Rise delay (ns)	Fall delay (ns)	Package
ARF3608-M	Power modulation chip	Dual-channel pressure modulation	5	0.5	/	/	20	35	Die
ARF3609	Power modulation chip	Single-channel pressure modulation	5	1	10	35	22	45	Die
ARF3609-M	Power modulation chip	Single-channel pressure modulation	5	1	10	35	22	45	Die
ARF3610	Power modulation chip	Dual-channel pressure modulation	5	A: 1 B: 1	20	56	40	55	Die
ARF3610-M	Power modulation chip	Dual-channel pressure modulation	5	A: 1 B: 1	20	56	40	55	Die

Switch Driver Chips

Model	Type	Description	Freq (MHZ)	Negative power supply voltage range(V)	TTL Control Signal High Level Detection Range(V)	TTL Control Signal Low Level Detection Range(V)	Output Voltage (V)	Rise_ Delay (ns)	Fall_ Delay (ns)	Rise time (ns)	Fall Time (ns)	Package
ARF3604	Switch Driver Chips	Switching Driver Chip	10	-26 ~ -40	2.2~5	0~0.8	0~-26/-30	40	55	20	20	Die
ARF3619	Switch Driver Chips	1 In 2 Out, -28V~40V/5V Dual Power Supply Switch Driver Chip (Output: -28V~40V)	10	-28 ~ -40	2.2~5	0~0.8	0~-28/-40	40	60	35	40	Die
ARF3624	Switch Driver Chips	1 In 2 Out, -5V Single Power Supply Switch Driver Chip (Output -5V)	10	-5	2.2~5	0~0.8	0~-5	30	35	5	5	Die

Others

Model	Type	Description	Working voltage	Package
ARF0474	5V High Current Dual Power Modulator	Two independent drive channels, input and output reversed, single channel peak current 150mA	3.3~6V	Die
ARF0475	High Voltage Switch	High voltage switch, maximum continuous leakage current 10A, on-resistance 73mΩ@Vgs=-10V	15~60V	Die
ARF0476 ARF0477 ARF0478	High Voltage Switch	High voltage switch, maximum continuous leakage current 60A, on-resistance 25mΩ@Vgs=-10V	15~60V	Die MD-0.5 TO-252
ARF0479 ARF0480 ARF0481	PMOS Driver	Convert the input TTL level to high voltage CMOS level output	20V~80V	Die SSOP10 CSOP10
ARF0487	GaN RF Switch Driver Chip	Switching delay less than 120ns, with latch function, output current capability greater than 20mA, TTL control.	-44V~-20V	Die
ARF0490	High Voltage Modulation Circuit	Integrated PMOS, PMOS driver and two Schottky diodes, load capacity: 6A (CW), 40A (Pulse).	48V/-5V	Die

Power Modulation Chip

Others

Model	Type	Description	Working voltage	Package
ARF0491	Highly Integrated High Voltage Modulation Circuit Chip	Integrated PMOS, PMOS driver, one Schottky diode, two-channel negative gate voltage drive (-3V), load capacity: 6A (CW), 40A (Pulse).	48V/-5V	Die
ARF0492	GaN Power Amplifier Multi-Function Power Supply Chip	Integrated PMOS, PMOS driver, negative gate voltage drive (-3.2V~-1.2V), load capacity: 2A (CW), 5A (Pulse).	28V/-5V	Die
ARF0493	Power Modulation Multi-Function Driver Chip	Integrated PMOS driver, two-channel low noise complementary modulation (150mA), one-channel drive modulation (250mA) and two-channel negative gate voltage drive (-2.4V~-1.7V).	28V/5V/-5V	Die
ARF0494	Four-Way Power Modulator Chip	Four-channel PMOS driver and four-channel power amplifier gate drive.	28V/-5V	Die
ARF0495	GaAs Power Amplifier Multi-Function Power Supply Chip	5V power modulation (average current 300mA, peak current 800mA), gate voltage drive (-0.3V~-0.9V, 20mA drive, 100mV interval), switch drive	-5V/5V	Die
ARF0497 ARF0498	General Multi-Function Power Supply Chip	Integrated PMOS (load capacity 2A), PMOS driver, two-channel low noise complementary power modulation (150mA), negative gate voltage drive (-3.2V~-1.2V).	28V/-5V	Die QFN48
ARF0499	High Voltage Modulation Circuit	Integrated PMOS, PMOS driver and Schottky diode, load capacity: 6A (CW), 40A (Pulse).	48V/-5V	Die

Negative Pressure Drive

Model	Type	Description	Working voltage	Package
ARF0502	Negative Pressure Drive	Gate voltage drive with a driving capability of 20mA, EN high, output range: -1.4~-2.6V, EN low, output range: -2.8~-4V	-4.5V~-7V	Die
ARF0503	Negative Pressure Drive	Gate voltage drive with a driving capability of 20mA, output range: -1.2V~-3.4V, voltage interval 50mV/100mV	-5V	Die
ARF0504	Negative Pressure Drive	Gate voltage drive with a driving capability of 5mA, output range: -1.8~-2.6, propagation delay less than 50ns, rise and fall time less than 20ns	-5V	Die
ARF0505	Negative Pressure Drive	Output -2.4~-1.7V, step 100mV, load capacity greater than ±5mA, propagation delay less than 120ns, rise and fall time less than 50ns	-5V	Die

SIP Module

SIP Module

Model	Description	Freq (GHz)	Channel	Rx/Tx Gain (dB)	Rx P-1dB /Tx Psat (dBm)	Rx NF (dB)	Power endurance (dBm)	Phase Shift/ Att (bit)	Phase Shift Accuracy (°)	Att Accuracy (dB)	RX Single channel Vdd/Idd (V/mA)	TX Single channel Vdd/I (V/mA)	Package
ARF5068	Dual-channel receiver module	3~4	2	27/-	-28/-	1	/	6/5	2	0.15	3.3/47	/	Ceramic
ARF5083	Four-channel T/R module	8~12	4	33/32	-30/34	1.5	/	6/6	1.5	0.5	3.7/125	28/320	Ceramic BGA
ARF5080	RF front-end module	8~12	1	28/ ≤50	-22 / 39	2.5	/	/	/	/	3.3/25	28/1400	Ceramic
ARF5059	Four-channel T/R module	14~18	4	28/26.5	-25/31	2.8	33	6/6	2.4	0.3	5/380, 3.3/120	5/14, 3.3/65	Ceramic BGA

ADC Chip&Differential PA

ADC

Model	Type	Number of channels	Number of digits	Maximum speed	Interface	Package	replacement
ARF0438	ADC	2	16	125Msps	LVDS+CMOS	QFN64	(Ad9268)
ARF0468	ADC	4	16	125Msps	CMOS + SPI	BGA400	
	DDS	4	14	1Gsps			
ARF0439	ADC	4	14	110Msps	LVDS	QFN48	(AD9253)
ARF0440	ADC	2	14	80Msps	CMOS	QFN64	(AD9251)
ARF0441	ADC	2	14	3Msps	CMOS	QFN16	(ADS7945/6)

Differential Amplifier

Model	Type	3dB Bandwidth (MHZ)	Input noise voltage (nV/√Hz)	Spurious-Free Dynamic Range (dBc)	Input offset voltage (mV)	Common mode rejection ratio(dB)	Output voltage swing (Vp-p)	Power consumption (+5V)	Package	Replacement
ARF0442	Differential Amplifier	315 (G=+1)	3.5	-91@5MHz	±0.5	-75	9.7	130mW	SOIC8	(Ad8138)
ARF0472	Differential Amplifier	315 (G=+1)	3.5	-91@5MHz	±0.5	-75	9.7	130mW	MSOP8	(AD8138)
ARF0473	Differential Amplifier	350 (G=+1)	3.5	-85@5MHz	±0.5	-85	9.7	135mW	SOIC8	(Ad8139)

Frequency Conversion Chips

Frequency Conversion Class Chip

Model	Function	Frequency (GHz)	IF Frequency range (GHz)	Local Oscillator Power (dBm)	TX Gain (dB)	RX Gain (dB)	TX Po1dB (dBm)	RX Po1dB (dBm)	RX NF (dB)	Package
ARF0506	Integrated up and down conversion, amplification and attenuation	0.3~1.5	0.05~0.4	0	39	38	14.5	20	5	CQFN48
ARF0507	Integrated up and down conversion, amplification and attenuation	0.3~1.5	0.05~0.4	0	39	38	14.5	20	5	QFN48
ARF0508	Integrated up and down conversion, amplification and attenuation	0.37~1.5	0.05~0.4	0	39	38	14.5	20	5	Die
ARF0509	Double balanced mixer	0.6~2.6	0.04~1.0	0	-12.5	-11.5	0.5	0.5	-	QFN16
ARF0510	Integrated up and down conversion, amplification and attenuation	1.2~1.4	0.3~0.5	0	39	25	8	18	-	QFN48
ARF0511	Double balanced mixer	2.5~4.0	DC~2.0	13	-6	-6	2	2	9	CSOP8
ARF0512	Integrated up and down conversion, amplification and attenuation	2.7~3.5	0.24~1.0	0	47	47	14.5	18.5	6.3	LCC48D
ARF0513		2.7~3.5	0.24~1.0	0	20.2	33	6.2	19.3	6	QFN48

Frequency Conversion Chips

Frequency Conversion Class Chip

Model	Function	Frequency (GHz)	IF Frequency range (GHz)	Local Oscillator Power (dBm)	TX Gain (dB)	RX Gain (dB)	TX Po1dB (dBm)	RX Po1dB (dBm)	RX NF (dB)	Package
ARF0516	Broadband High Linearity Downconversion	0.4~4/ 0.3~5	0.05~1.6	-3	27.5@ 1.95GHz	-0.3@ 1.95GHz	Input 11.6 @1.95GHz	Single Sideband 12.4 @1.95GHz	QFN16	(Lt5557)
ARF0517	Quadrature Demodulator, Integrated Switch, DSA	0.3~4/ 0.3~5	0.02~0.5	0	45@ 1.95GHz	13@ 1.95GHz	Output 15.5 @1.95GHz	Double sideband 18 @1.95GHz	QFN36	(IDTF1358NBGI)
ARF0518	High Linearity Quadrature Modulator	0.4~4/ 0.4~4	0~09	0	29@ 2.14GHz	2.24@ 2.14GHz	Input 10.6 @2.14GHz	-160dBm / Hz @2.14GHz	QFN24	(TRF37T05)

Detector&Coupler&Switch

Detector

Model	Type	Frequency (GHz)	±1dB Dynamic range (dB)	Maximum input power (dBm)	Rising edge (ns)	Falling edge (ns)	Power supply (V)	Package
ARF0522	Detector	0.002~6	65@2GHz	7	10	20	2.7~5.5	QFN16
ARF0523	Detector	2~40	50@24GHz	10	10	20	2.7~5.5	FCLGA16

Coupler

Model	Type	Freq (GHz)	IL (dB)	Coupling degree (dB)	VSWR	ISO (dB)	Package
ARF0524	Coupler	1.2~1.4	0.4	28	1.5	50	QFN16
ARF0525	Coupler	2.0~3.5	0.5	30	1.5	45	QFN16
ARF0526	Coupler	5.0~13.0	0.1	25	1.3	35	Die
ARF0527	Coupler	7.0~13.0	0.1	18	1.3	31	Die

Power Divider

Model	Type	Description	Frequency (GHz)	IL (dB)	ISO (dB)	Package
ARF0428	Power Divider	One to four	0.8~2.0	1.5	20	QFN16
ARF0426	Power Divider	One to two	0.8~2.0	0.9	25	Die
ARF0427	Power Divider	One to two	0.8~2.0	0.9	25	QFN16
ARF0429	Power Divider	One to two	2.0~4.0	0.9	20	QFN16
ARF0433	Power Divider	One to four	2.7~3.5	1	20	SOP8
ARF0431	Power Divider	One to two	2.0~6.0	0.7	15	Die
ARF0430	Power Divider	One to two	2.0~6.0	0.7	15	QFN16
ARF0432	Power Divider	One to four	2.0~6.0	1.6	20	Die
ARF0434	Power Divider	One to two	4.0~9.0	0.7	21	Die
ARF0435	Power Divider	One to two	6.0~18.0	0.9	16	Die
ARF0528	Power Divider	One to two	6.0~18.0	1.5	20	QFN16L
ARF0529	Power Divider	One to four	6.0~18.0	1.5	18	CQFN32L
ARF0436	Power Divider	One to four	6.0~18.0	1.5	20	Die

Detector&Coupler&Switch

Switch

Model	Type	Description	Freq (GHz)	IL (dB)	ISO (dB)	Switch time (ns)	IP-1 (dBm)	Package	Replacement
ARF4605	Switch	GaN SPDT	0~2	0.4	50	60	44	Die	
ARF4606	Switch	GaN SP3T	0~2	0.7	50	80	44	Die	
ARF0417	Switch	Absorptive SPDT	0.1~4.0	0.75	47	180	33	TSSOP8	(HMC349AMS8G)
ARF0423	Switch	Absorptive SPDT	0.1~6.0	1.5	40	150	38	QFN16	(HMC8038LP4CE)
ARF0421	Switch	Absorptive SPDT	0.1~6.0	0.8	46	150	38	Die	
ARF0425	Switch	Absorptive SP4T	0.1~6.0	1.3	38	160	32	QFN16	(HMC7992LP3DE)
ARF0424	Switch	Absorptive SP4T	0.1~6.0	0.8	46	160	32	Die	
ARF0422	Switch	Absorptive 2P2T	0.1~6.0	1.4	45	120	32	QFN16	
ARF0419	Switch	Absorptive SP8T	0.1~4.0	2	35	160	34	SSOP24	(HMC253QS24)
ARF0420	Switch	Absorptive SP8T	0.1~4.0	2	40	160	34	QFN24	(HMC321ALP4E)
ARF0530	Switch	Absorptive SP8T	0.1~4.0	2	35	160	34	Die	
ARF0532	Switch	Absorptive SPDT	7~13	1.8	39	30	24	Die	
ARF4609	Switch	GaN SPDT	7~13	1	36	80	43	Die	
ARF5084	Switch	GaN SPDT	7~13	1.3	40	95	42	Ceramic	

Fixed Att& Digital Att

Digital Attenuator

Model	Type	Freq (GHz)	IL (dB)	Attenuation (dB)	Number of digits	Supply voltage (V)	High level range (V)	Control method	Package	Replacement
ARF0447	Digital Attenuator	0.1~3.8	2	31.5	6	5	2.5~5	Parallel Port	QFN24	(HMC472)
ARF0446	Digital Attenuator	0.1-3.0	1.5	0-31	5	5	2.5~5	Parallel Port	QFN16	(HMC470ALP3E)
ARF0448	Digital Attenuator	0.1~6.0	2	0-31.5	6	5	2.5~5	Parallel Port	QFN24	(HMC624ALP4E /HMC1122)
ARF0449	Digital Attenuator	0.1~6.0	1.5	0-31.75	7	3.3	1.2~3.6	Serial Port / Parallel Port	QFN24	(HMC1119)
ARF0450	Digital Attenuator	0.1~6.0	1.5	0-31.75	7	3.3	1.2~3.6	Serial Port / Parallel Port	Die	

Fixed Attenuator

Model	Type	Freq (GHz)	Attenuation (dB)	Package
ARF0561	Fixed Attenuator	DC~40	0	Die
ARF0562	Fixed Attenuator	DC~40	1	Die
ARF0563	Fixed Attenuator	DC~40	2	Die
ARF0564	Fixed Attenuator	DC~40	3	Die
ARF0565	Fixed Attenuator	DC~40	5	Die
ARF0566	Fixed Attenuator	DC~40	6	Die
ARF0567	Fixed Attenuator	DC~40	7	Die
ARF0568	Fixed Attenuator	DC~40	8	Die
ARF0569	Fixed Attenuator	DC~40	9	Die
ARF0570	Fixed Attenuator	DC~40	10	Die

Fixed Att& Digital Att

Optical Communication Chip

Model	Type	Application	Function	Rate (Gbps)	Power supply voltage(V)	Transimpedance (Kohm)	Sensitivity (dBm)	Overload (dBm)	Signal detection method	Package
ARF0571	Optical Communication Chip	OLT	TIA	1.25	3.3	3	-35	-4	-	Die
ARF0572	Optical Communication Chip	OLT	TIA	2.5	3.3	3.8	-34.5	-3	-	Die
ARF0573	Optical Communication Chip	OLT	TIA	1.25	3.3	7.6	-38	-4		Die
ARF0578	Optical Communication Chip	OLT	TIA	10	3.3	7	-32.5	-5	-	Die
ARF0579	Optical Communication Chip	OLT	TIA	10	3.3	7	-32.5	-4	-	Die
ARF0580	Optical Communication Chip	OLT	LA	10	3.3	-	-	-	SD/LOS	QFN20
ARF0581	Optical Communication Chip	OLT	EML Transceiver	10(TX)&10(RX)	3.3&1.8	-	-	-	SD/LOS	QFN32
ARF0582	Optical Communication Chip	OLT	EML Transceiver	10(TX)&2.5(RX)	3.3&1.8	-	-	-	SD/LOS	QFN32

SAW bandpass filter

Model	Passband Frequency (GHz)	Insertion loss (dB)	Maximum input power (dBm)	Package
ARF0588	1.55905-1.60589	≤1.7	15	CSP
ARF0589	1.164-1.189	≤1.5	15	CSP