



MMIC & MCM TRANSISTOR



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Introduction

NEDI Technology Co., LTD (NEDITEK) is the high technology company dealing with semi-conductor material, components and devices. It is specialized in providing high reliability microwave and millimeter-wave circuits, modules and sub-systems. All the offered products and solutions have reached international standards and could be developed according to customer's requirements for product parameters, outline, encapsulation, and reliability etc.

NEDITEK offers qualified Microwave and Millimeter-wave products and solutions for a wide range of applications like automobile telematics and sensors, radio and wireless communication sets, satellite remote sensing and telemetry, and other civil fields.



GaN Power Amplifier

Item No.	Frequency (GHz)	Gain (dB)	Power Output (dBm)	Voltage(V)	Current(A)	PAE (%)	Operation Condition	Dimension (mm)
NDNC01027	2-6	25	43	28	2.8	35	CW	3.5*4.1*0.08
NDNC01056	2-20	12	40	28	1.6	20	CW	4.7*2.3*0.08
NDNC01064	2-18	13	40	28	1.2	20	CW	5.2*2.5*0.08
NDNC01065	2-18	16	40	28	2.0	20	CW	4.8*3.5*0.08
NDNC01030	5-6	33	48	28	7	48	Pulse	3.7*5.5*0.08
NDNC01026	6-7.5	31	47	28	7	40	Pulse	3.4*5.3*0.08
NDNC01053	6-18	27	42	28	2.5	25	CW	3.5*3.55*0.08
NDNC01040	8-12	25	27	28	0.22	/	Pulse	2.2*1.2*0.08
NDNC01042	8-12	28	42	28	1.5	35	CW	2.5*3.8*0.08
NDNC01044	8-12	28	43	28	2.9	40	Pulse	2.5*3.8*0.08
NDNC01047	8-12	27	47	28	5.7	43	Pulse	5.3*4.0*0.08
NDNC01038	8.5-10.5	27	47	28	4.6	48	Pulse	5.3*4.0*0.08
NDNC01011	10-18	22	43	28	4	32	Pulse	2.4*3.2*0.08
NDNC01055	14-18	23	47	28	7	34	Pulse	3.3*4.3*0.1
NDNC01050	15-17	28	42	28	1.6	33	Pulse	2.3*1.9*0.08
NDNC01025	33-37	20	41	24	2.6	30	Pulse	2.8*3.4*0.08
NDNC01060	37-43	18	39	20	3.5	15	CW	3.5*4*0.08
NDNC01062	92-96	14.5	30	15	0.45	15.5	CW	3.4*1.43*0.05

Note: All the MMICs above are delivered with die form, packaged form is also available if required.

GaN Power Switch

Item No.	Function	Frequency (GHz)	IL(dB)	Isolation (dB)	Input P-0.3 (dBm)	VSWR	Tons-Off (nS)	Control Voltage	Dimension (mm)
NDNC02030	SPDT	0.5-2.5	0.6	35	52	1.3	20	0/-40V	1.9*0.9*0.08
NDNC02032	SPDT	DC-3	0.6	39	49	1.3	20	0/-40V	1.19*0.9*0.1
NDNC02034	SPDT	DC-6	0.8	38	48	1.5	20	0/-40V	1.6*0.85*0.1
NDNC02035	SPDT	DC-6	1.2	40	48	1.3	20	0/-40V	1.8*0.9*0.1
NDNC02001	SPDT	DC-7	0.4	30	46	1.2	20	0/-40V	1.2*0.82*0.1
NDNC02039	SPDT	8-12	0.75	30	47	1.3	20	0/-40V	1.8*1.45*0.08
NDNC02040	SPDT	8-12	0.6	40	46	1.3	20	0/-40V	1.8*1.45*0.08
NDNC02004	SPDT	DC-18	0.8	35	38	1.2	20	0/-40V	1.2*0.82*0.1
NDNC02005	SPDT	DC-18	1.5	35	44	1.8	10	0/-40V	1.8*0.82*0.1
NDNC02041	SPDT	DC-18	1.2	35	40	1.4	10	0/-40V	1.45*0.9*0.08
NDNC02042	SPDT	DC-18	1.3	35	43	1.4	10	0/-40V	1.25*1.45*0.08
NDNC02025	SPDT	10-18	0.7/1.2	20/28	47/42	1.6/2	10	0/-40V	1.8*0.85*0.1
NDNC02020	SPDT	12-18	0.6	30	40	1.5	10	0/-40V	1.8*1.19*0.1
NDNC02043	SPDT	12-18	0.8	38	44	1.5	10	0/-40V	1.8*0.95*0.08
NDNC02026	SPDT	15-18	0.9	40	43	1.5	10	0/-40V	1.8*0.87*0.08
NDNC02044	SPDT	34-36	1.3	25	40	1.5	20	0/-40V	2.35*1.45*0.1
NDNC02021	SPDT	30-40	1.1	30	38	1.3	20	0/-40V	1.85*0.8*0.1

Note: All the MMICs above are delivered with die form, packaged form is also available if required.

GaAs Power Amplifier

Item No.	Frequency (GHz)	Gain (dB)	Psat(P-1) (dBm)	VSWRin	Bias Voltage (V)	Dynamic Current(A)	PAE (%)	Dimension (mm)
NDAC01107	0.8-1.6	34	27.5	1.5	28	0.13	/	3.4*2.5*0.08
NDAC01068	0.1-2	12.5	15	1.5	5	0.056	/	1.05*1.0*0.1
NDAC01070	0.8-2	23	27.5	1.5	8	0.35	25	3.1*1.7*0.08
NDAC01108	0.8-2	26	30.5	1.4	8	0.32	43	3.2*2.0*0.08
NDAC01071	1.9-3	31	33.6	1.5	5	1.2	39.9	2.85*2.9*0.08
NDAC01069	0.2-3.2	14	19	1.4	5	0.043	/	1.05*0.5*0.1
NDAC01005	0.2-3.5	17	15	1.4	5	0.04	/	0.68*0.56*0.075
NDAC01006	0.2-3.5	20	16	1.25	5	0.045	/	0.75*0.56*0.075
NDAC01007	0.2-3.5	20	21	1.8	6.5	0.125	/	0.89*0.56*0.075
NDAC01109	2.7-3.5	22	26.5	1.5	28	0.13	/	2.3*1.6*0.08
NDAC01076	2.7-3.5	27	27.5	2	9	0.45	/	2.7*1.6*0.1
NDAC01013	2.7-3.5	26	41	2	8.5	6.6	30	3.6*4.0*0.08
NDAC01001	DC-4	20	12	1.3	4.7	0.035	/	0.73*0.56*0.075
NDAC01002	DC-4	21	17	1.3	4.6	0.065	/	0.83*0.56*0.075
NDAC01003	DC-4	20	19	1.3	5	0.08	/	0.81*0.56*0.075
NDAC01067	0.1-4	15	16	1.4	3.4	0.04	/	0.67*1.1*0.1
NDAC01017	5.2-5.8	32	40.2	2	9	2.5	45	3.6*2.6*0.08
NDAC01018	5.3-5.9	30	42	1.5	9	5.5	37	3.5*3.6*0.08
NDAC01110	DC-6	16	11	1.3	4.7	0.035	/	0.63*0.56*0.075
NDAC01008	2-6	14	19.5	1.5	8	0.1	/	2.1*1.6*0.08
NDAC01009	2-6	25	20.5	2	8	0.11	/	2.6*1.6*0.08
NDAC01010	2-6	24	26.5	1.5	8	0.35	20	2.8*1.6*0.08
NDAC01112	2-6	24	30	1.25	8	0.4	35	3.1*2.5*0.08
NDAC01072	2-6	23	32	2	5/-0.6	1.25	25	3.7*2.8*0.08
NDAC01011	2-6	27	36.5	2.3	8	2	28	3.6*2.8*0.08
NDAC01073	2-6	24	38	2.3	10	2.5	23	3.6*2.8*0.08
NDAC01012	2-6	23	39.5	2	9/-0.5	4.5	22	4.3*5.6*0.08
NDAC01014	5-6	19	21.5	1.8	8	0.1	/	2.1*1.6*0.08
NDAC01015	5-6	32	36.5	2	8	1.75	35	3.6*2.6*0.08

GaAs Power Amplifier

Item No.	Frequency (GHz)	Gain (dB)	Psat(P-1) (dBm)	VSWRin	Bias Voltage (V)	Dynamic Current(A)	PAE (%)	Dimension (mm)
NDAC01016	5-6	31	38.5	1.8	10	2.25	34	3.6*2.6*0.08
NDAC01075	2.5-6.5	24	35.5	2	8/-0.6	1.75	25	3.7*2.8*0.08
NDAC01019	7.7-8.5	32	41	1.8	8-8.5	3.8	43	3.5*4*0.08
NDAC01020	9-10	20.5	28.5	1.3	8	0.21	43	1.5*3*0.08
NDAC01021	9-10.2	16	20	1.6	8	0.1	/	2.1*1.5*0.08
NDAC01022	9-10.2	27	41	1.8	8	3.75	40	3.2*4*0.08
NDAC01023	8.5-10.5	19	19.5	1.5	8.5	0.12	/	2.1*1.57*0.08
NDAC01024	8.5-10.5	30	34	2	8	0.75	50	3*1.8*0.08
NDAC01025	8.5-10.5	25	40.5	1.8	8	3.75	36	3.5*3.9*0.08
NDAC01026	8.5-10.5	25	41.2	1.8	8.5	4	40	3.2*4*0.08
NDAC01074	2-12	20	30	2	8	0.75	17	3.5*1.4*0.08
NDAC01027	8-12	13	21	1.5	8	0.1	/	2.1*1.5*0.08
NDAC01028	8-12	16	21	1.5	8	0.1	/	2.1*1.5*0.08
NDAC01090	8-12	23	21.5	1.2	8	0.12	/	2.67*1.6*0.08
NDAC01029	8-12	14	23	1.2	8	0.12	/	2.1*1.5*0.08
NDAC01092	8-12	21	24	1.5	8	0.15	/	2.67*1.6*0.08
NDAC01030	8-12	24	33.5	1.5	8	1	33	3*1.8*0.08
NDAC01093	8-12	28	37.5	2	8	2	40	3.2*2.2*0.08
NDAC01094	8-12	26	39	2	8	3.75	37	3.2*4*0.08
NDAC01031	8-12	25	41.3	1.5	8	4.7	37	3.2*4*0.08
NDAC01113	10-12	30	37	2	8	1.8	43	3.2*2.2*0.08
NDAC01114	10-12	26	39	2	8	3.6	41	3.2*4*0.08
NDAC01032	11.5-12.5	27	41.3	2	8.5	4.5	33	3.2*4*0.08
NDAC01116	13-14.5	24.5	38	1.5	8	1.9	40	3.4*2.6*0.1
NDAC01141	14-16	17.5	19.5	1.5	8	0.055	/	2*1.5*0.08
NDAC01117	14.5-16	24	37.5	1.8	8	1.8	40	3.4*2.6*0.1
NDAC01035	12-17	24	37	2.5	8	3	20	3.5*3.4*0.08
NDAC01036	14.5-17.5	23	38	1.6	8	3	33	3.5*3.4*0.08
NDAC01041	6-18	15.5	19	1.5	5	0.094	/	0.95*0.95*0.1

GaAs Power Amplifier

Item No.	Frequency (GHz)	Gain (dB)	Psat(P-1) (dBm)	VSWRin	Bias Voltage (V)	Dynamic Current(A)	PAE (%)	Dimension (mm)
NDAC01084	6-18	13	18	1.2	5	0.07	/	1.05*0.95*0.1
NDAC01043	6-18	23	31	2	5	1.15	30	2.95*2.25*0.1
NDAC01044	6-18	20	36	2.5	8	2.5	25	3.5*3.4*0.08
NDAC01085	6-18	15	22	1.6	5/8	0.19	/	2.0*1.2*0.08
NDAC01086	6-18	22.5	22	2	5/8	0.2	/	2.0*1.2*0.08
NDAC01118	6-18	23	36	1.5	8	1.4/2.8	25	4.3*5.7*0.1
NDAC01045	6-18	23	37.5	2	8	1.5/3	25	4.3*5.7*0.1
NDAC01119	13-18	29	29	1.6	8	0.35	30	2.6*1.6*0.08
NDAC01140	14-18	16.5	19	1.6	8	0.055	/	2.1*1.5*0.08
NDAC01037	14-18	22	20.5	1.5	8	0.12	/	2.1*1.5*0.08
NDAC01038	14-18	24	35	1.5	8	1.13	35	3.129*2.086
NDAC01099	14-18	23	40	2	8	5	32	3.5*4*0.08
NDAC01121	16-18	16	25	2	8	0.25	/	2.5*1.4*0.08
NDAC01122	16-18	27	40.8	2	8-8.5	5	32	3.5*4.6*0.1
NDAC01042	6-20	17	14	2	5	0.036	/	0.92*0.92*0.08
NDAC01124	19.6-22	25.5	26	1.8	5	0.18	40	2.1*1.3*0.05
NDAC01126	21-24	25.5	26	2	5	0.21	40	2.1*1.3*0.05
NDAC01127	22-27	20	36	2	6	3	22	3.5*4.6*0.05
NDAC01101	25-27	26	21	2	5	0.08	36	1*2.2*0.05
NDAC01128	25-27	22	36.5	2	6	3	30	3.5*4.3*0.05
NDAC01052	29-31.5	24.5	23.5	2	5	0.15	30	2.0*1.0*0.05
NDAC01051	29-32	20	37	2	6	3.9	25	3.5*4.2*0.05
NDAC01054	34-36	21	20	2	6	0.085	26	1.8*0.9*0.05
NDAC01105	34-36	18	33	2	6	1.6	23	3*2.6*0.05
NDAC01055	34-36	18	37	2	6-6.5	3.5	24	3*4.3*0.05
NDAC01130	33-37	25.5	24	1.5	6	0.25	17	2.8*1.2*0.05
NDAC01131	33-37	22.5	27	1.2	5	0.3	29	3.67*2.3*0.05
NDAC01059	33-37	22	28	1.3	5	0.65	22	3.6*2*0.05
NDAC01132	33-37	25	29.5	1.1	5	0.06	29	3.6*1.9*0.05

GaAs Power Amplifier

Item No.	Frequency (GHz)	Gain (dB)	Psat(P-1) (dBm)	VSWRin	Bias Voltage (V)	Dynamic Current(A)	PAE (%)	Dimension (mm)
NDAC01103	33-37	23	30	1.1	6	0.42	30	3.67*2.3*0.05
NDAC01060	33-37	20	30	2	5-6	0.6	30	3.0*1.6*0.05
NDAC01104	33-37	25	35.5	3	6	3.25	20	3*4.5*0.05
NDAC01133	33-37	21	36	1.3	6.5	3	23	3.8*4.8*0.05
NDAC01061	19-38	22	22	2.5	6	0.2	15	2.64*1.04*0.05
NDAC01062	26-40	23	27	3	6	0.8	16	2.64*1.96*0.05
NDAC01134	26-40	22	30	2	6	1.7	15	3.5*3.85*0.05
NDAC01135	26-40	19	35	1.4	6	2.75	16	3.2*4.25*0.05
NDAC01136	30-40	23.5	19.5	1.5	5	0.15	/	2.6*1.0*0.05
NDAC01137	30-40	21	32.6	1.2	6	1.2	20	2.5*2.2*0.05
NDAC01064	30-40	21	33	2.5	6	1.4	22	2.6*2.4*0.05
NDAC01139	43-46	22	21	2.5	5	0.18	/	3.2*1.3*0.05
NDAC01106	43-46	15	33	2	6	3.3	11	3.9*4.8*0.05



GaAs Gain Amplifier MMIC

Item No.	Frequency (GHz)	Gain(dB)	VSWR	NF(dB)	Voltage (V)	Current (mA)	P-1 (dBm)	Dimension(mm)
NDAC02044	0.1-2	16.5	1.4/1.6	1.7	5	64	16	1.05*1*0.1
NDAC02003	0.8-3.2	18	1.4/1.8	1.8	5	73	17	1.215*1.3*0.1
NDAC02010	5-6	15	1.3/1.6	1.9	4	35	14	1.65*1.2*0.1
NDAC02049	5-6	10.5	1.6/1.2	3.3	5	30	14.5	1.65*1.35*0.1
NDAC02018	8-12	9	1.8/1.6	3.0	3-5	35	14	1.52*1.48*0.1
NDAC02050	8-12	13.5	1.2/2.0	3.8	5	24	13	1.7*1.05*0.1
NDAC02052	2-18	17	1.5/1.5	3.5	5	48	15	2.68*1.36*0.1
NDAC02025	6-18	9.5	1.4/1.3	3.5	5	74	19	2.13*1.34*0.1
NDAC02054	6-18	9	1.6	2.5	3	42	13	1*1*0.1
NDAC02029	2-20	17	1.3/1.5	2.5	5	61	15.5	3*1.5*0.1
NDAC02059	10-22	18	2	3.5	5	80	16	2.56*2*0.08
NDAC02034	18-23	27	1.6	2.2	5	65	13	2.3*1.16*0.1
NDAC02200	33-37	26	1.5	2.5	5	45	12	1.5*1.0*0.1
NDAC01056	32-37	19.5	2	/	3.3	0.048	10	1.46*0.75*0.05
NDAC01057	32-37	22	2	/	3.3	0.07	12	1.72*0.75*0.05

Note: All the MMICs above are delivered with die form, packaged form is also available if required.

GaAs Low Noise Amplifier MMIC

Item No.	Frequency (GHz)	Gain(dB)	VSWR	NF(dB)	Voltage(V)	Current(mA)	P-1 (dBm)	Dimension(mm)
NDAC02002	0.8-3.2	20	1.4/1.6	0.8	5	80	8	1.215*1.645*0.1
NDAC02075	0.8-18	17	1.3/1.3	2.4	"5/-0.3 /-0.5"	70	16	3.30*1.54*0.1
NDAC02030	2-20	20	1.5/1.8	2.5	5	55	16	2.7*1.63*0.1
NDAC02031	2-20	18	1.3/1.5	2.5	5	70	16.5	3.04*1.54*0.1
NDAC02032	2-20	18	1.3/1.5	2.5	5	70	16.5	3.04*1.54*0.1
NDAC02077	2.7-3.5	29	1.5/1.3	0.6	5	35	12	1.9*1.5*0.1
NDAC02078	3-18	29	1.7	1.8	5	32	8	2.0*1.3*0.1
NDAC02005	4-6	27	1.6/1.3	1.1	5	13	7	1.78*1.38*0.1
NDAC02079	5-6	25	1.4	0.7	5	35	12	2*1.2*0.1
NDAC02080	5-12	22	1.5	1.2	5	22	8	2.0*1.0*0.1
NDAC02081	6-18	21	1.5	1.5	5	42	5	2*1*0.1
NDAC02022	6-18	19.5	2	/	3.5	80	15.5	1.335*1.5*0.1
NDAC02023	6-18	25	1.6/2.0	1.6	5	70	12	2.5*1.46*0.1
NDAC02024	6-18	19.5	2	1.8	5	75	16	1.335*1.05*0.1
NDAC02011	7-11	23	1.8	1.1	5	35	9	1.75*1.63*0.1
NDAC02013	7-11.5	28	1.8	1.1	5	70	14	2.11*1.63*0.1
NDAC02014	7-11.5	26	1.8/1.6	1.2	3.3	34	5	2.11*1.63*0.1
NDAC02015	8-12	22	2	1.3	5	17	6.5	1.004*1.46*0.1
NDAC02082	8-12	20	1.5	1.1	5	14	4	1.5*1.0*0.1
NDAC02055	10-18	25	1.5	1.5	5	15	3	1.86*1.0*0.1
NDAC02056	12-18	17	2	1.5	3.5	20	5	1.335*0.885*0.1
NDAC02026	12-18	21	1.7	1.5	5	55	10	2.3*1.38*0.1
NDAC02083	14-17	28	1.5	1.2	5	50	10	2.29(1.9)*1.0*0.1
NDAC02027	14-18	23	2/1.5	1.4	4-5	70	10	2.175*1.34*0.1
NDAC02028	14-18	18	1.8	1.4	5	45	9	2.12*1.6*0.1
NDAC02062	18-24	20	1.7/1.6	1.8	5	17	1.5	2*0.9*0.1
NDAC02035	19-24	24	1.3	1.6	4	24	3	1.92*0.75*0.1
NDAC02065	19-24	23	1.3	1.6	5	7	-2	1.92*0.75*0.1
NDAC02085	19.6-21.2	25	1.5	1.5	5	9	0	2*0.8*0.1
NDAC02086	24-31	24	1.5	2	5	11	3	1.55*1*0.1
NDAC02087	24-43	22	1.5	2.5	5	75	12	2*1.31*0.1
NDAC02088	25.2-27.5	26	1.5	1.7	5	9	3	1.9*0.8*0.1
NDAC02089	25.2-27.5	14.5	1.4	1.8	5	8	0	1.8(1.2)*1.0*0.1
NDAC02090	26-40	17	1.5	2.2	5	28	5	1.5*0.8*0.1
NDAC02037	29-31	27	1.5	1.8	5	19	0	2.3*1.1*0.1
NDAC02091	29-31	21	1.7/1.5	1.7	5	7	-2	1.8(1.5)*1.0*0.1
NDAC02092	29-31	14	1.4	2.1	5	8	0	1.8(1.2)*1.0*0.1
NDAC02073	40-50	18	2.2/1.8	2	5	11	2	1.34*0.8*0.05

Note: All the MMICs above are delivered with die form, packaged form is also available if required.

GaAs Phase Shifter MMIC

Standard

Item No.	Frequency (GHz)	Bits	RMS Phase Error(°)	IL(dB)	Δ IL(dB)	VSWR	Control Input Voltage	Dimension(mm)
NDAC03001	0.26-0.5	6	3	-6.5	± 0.5	1.4	0V/-5V	8.17*1.79*0.1
NDAC03005	0.9-1.3	6	1.5	-5	± 0.3	1.3	0V/-5V	5.34*1.98*0.1
NDAC03046	1.2-1.4	6	1	-4.0	± 0.3	1.3	0V/-5V	4.85*1.9*0.1
NDAC03004	0.8-1.7	6	3	-9	± 0.5	1.4	0V/-5V	9.8*2.98*0.1
NDAC03044	1.1-1.7	6	2	-5	± 0.3	1.3	0V/-5V	5.34*1.9*0.1
NDAC03010	1.7-1.9	6	1	-5	± 0.3	1.3	0V/-5V	5.34*1.9*0.1
NDAC03007	1-2	6	4	-7.0	± 0.5	1.4	0V/-5V	9.8*2.98*0.1
NDAC03008	1.4-2	6	1.5	-6	± 0.3	1.3	0V/-5V	5.34*1.9*0.1
NDAC03042	0.8-2.4	6	3	-12	± 1	1.5	0V/-5V	9.8*3.27*0.1
NDAC03011	2-2.5	6	1	-4.8	± 0.3	1.3	0V/-5V	4.5*1.5*0.1
NDAC03009	1.6-3.2	6	3	-9.5	± 0.5	1.4	0V/-5V	9.8*2.5*0.1
NDAC03012	2.7-3.5	6	1.5	-5	± 0.3	1.3	0V/-5V	4.5*1.4*0.1
NDAC03054	5-6	6	1	-5.6	± 0.3	1.3	0V/-5V	4*1.3*0.1
NDAC03017	2-6.5	6	5	-10	± 0.8	1.8	0V/-5V	5*5*0.1
NDAC03018	6-7.4	6	1	-6	± 0.3	1.3	0V/-5V	4*1.3*0.1
NDAC03057	9-10	6	1.5	-6.5	± 0.3	1.4	0V/-5V	4.05*1.36*0.1
NDAC03020	8.5-10.5	6	1.5	-7	± 0.3	1.4	0V/-5V	4.05*1.36*0.1
NDAC03021	8-12	6	1.5	-7.5	± 0.4	1.4	0V/-5V	4.04*1.84*0.1
NDAC03026	12-15	6	1.5	-8	± 0.3	1.4	0V/-5V	3.1*1.21*0.1
NDAC03028	6-18	6	4	-12	± 1	1.6	0V/-5V	3.2*3*0.1
NDAC03030	14-18	6	2	-7.5	± 0.4	1.4	0V/-5V	3*1.1*0.1
NDAC03032	19-23	6	2	-8	± 0.6	1.5	0V/-5V	3.6*1.36*0.1
NDAC03033	22-26	6	2	-9	± 0.6	1.5	0V/-5V	3.19*1.39*0.1
NDAC03034	25-28.5	6	2	-8	± 0.5	1.5	0V/-5V	3.21*1.31*0.1
NDAC03075	33-37	5	2	7.0	± 0.5	1.5	0V/-5V	2.6*1.1*0.08
NDAC03076	33-37	5	2	7	± 0.5	1.5	0V/-5V	2.6*1.1*0.08
NDAC03077	33-37	6	3	7.5	± 0.5	1.5	0V/-5V	2.8*1.1*0.08
NDAC03078	30-40	6	3.5	7.5	± 0.6	1.8	0V/-5V	2.8*1.1*0.08

TTL Driver

Item No.	Frequency (GHz)	Bits	RMS Phase Error(°)	IL(dB)	Δ IL(dB)	VSWR	Control Input Voltage	Dimension(mm)
NDAC03066	9-10	4	1	-1	± 0.2	1.2	0V/-5V	1.7*1.5*0.1
NDAC03067	6-18	6	4	-12	± 1	1.6	-5V	2.74*3.5*0.1
NDAC03068	19-23	6	3	-8	± 0.5	1.5	5/-5V	3.45*2.4*0.1
NDAC03070	25-31	6	3	-7	± 0.4	1.6	5/-5V	3.05*2.2*0.08

Note: All the MMICs above are delivered with die form, packaged form is also available if required.

GaAs Digital Attenuator MMIC

Standard

Item No.	Frequency (GHz)	Bits	LSB(dB)	IL(dB)	VSWR	Attenuation Accuracy	Ton/ Toff(ns)	Control Input Voltage	Dimension (mm)
NDAC05001	DC-4	6	0.5	1.3	1.3	$\pm(0.3+4\%Ai)$	20	0/-5V	2.1*0.95*0.1
NDAC05055	DC-6	6	0.5	2	1.3	$\pm(0.3+5\%Ai)$	20	-5V/0V	2.2*1*0.1
NDAC05025	DC-6	6	0.25	0.8	1.3	$\pm(0.3+5\%Ai)$	20	-5V/0V	2*0.8*0.1
NDAC05038	5-6	6	0.5	1.8	1.4	$\pm(0.3+4\%Ai)$	20	0/-5V	3.25*1*0.1
NDAC05010	2-6.5	5	0.5	2	1.3	$\pm(0.2+5\%Ai)$	20	0/-5V	2.33*1.2*0.1
NDAC05035	2-6.5	6	0.5	3	1.4	$\pm(0.3+5\%Ai)$	20	0/-5V	3.25*1.2*0.1
NDAC05003	DC-8	1	32	2	1.4	± 2.5	20	0/-5V	1.45*1.2*0.1
NDAC05004	DC-10	4	0.3	1.3	1.4	$\pm(0.2+5\%Ai)$	20	0/-5V	1.45*1.2*0.1
NDAC05030	DC-12	6	0.25	2.5	1.3	$\pm(0.2+5\%Ai)$	20	0/-5V	2.33*1.13*0.1
NDAC05011	8-12	6	0.5	3.5	1.4	$\pm(0.3+5\%Ai)$	20	0/-5V	3.25*1.25*0.1
NDAC05005	DC-18	1	20	2	1.4	± 1	20	0/-5V	1.2*0.95*0.1
NDAC05007	DC-18	3	0.2	0.5	1.5	± 0.2	20	0/-5V	1.2*1.03*0.1
NDAC05008	DC-18	6	0.3	3.5	1.4	$\pm(0.2+5\%Ai)$	20	0/-5V	2.35*1.2*0.1
NDAC05032	DC-18	6	0.5	4.0	1.3	$\pm(0.3+5\%Ai)$	20	0/-5V	2.6*1.0*0.1
NDAC05039	6-18	6	0.5	4.5	1.4	$\pm(0.3+5\%Ai)$	20	0/-5V	3.26*1.04*0.1
NDAC05012	6-18	3	5	3.5	1.5	$\pm(0.3+5\%Ai)$	20	0/-5V	2.49*1.24*0.1
NDAC05014	6-18	6	0.5	5	1.5	$\pm(0.3+8\%Ai)$	20	0/-5V	3.25*1.2*0.1
NDAC05063	14-18	3	25	0.8	1.4	± 1.5	20	0/-5V	0.8*1.0*0.08
NDAC05015	14-18	6	0.5	4.5	1.4	$\pm(0.3+5\%Ai)$	20	0/-5V	3*1.25*0.1
NDAC05009	DC-20	3	0.25	0.55	1.3	$\pm(0.3+5\%Ai)$	20	0/5V	1.35*1.0*0.1
NDAC05033	DC-20	3	0.25	0.4	1.4	± 0.2	20	0/-5V	1.35*0.97*0.1
NDAC05034	DC-20	1	32	2.0	1.4	± 1.5	20	0/-5V	1.2*1.1*0.1
NDAC05016	17-23	5	0.5	2.5	1.5	$\pm(0.3+5\%Ai)$	20	0/-5V	1.35*1.08*0.1
NDAC05017	19-23	6	0.5	2	1.5	$\pm(0.3+5\%Ai)$	20	0/-5V	3.25*1*0.1
NDAC05018	20-30	6	0.5	2.5	1.5	$\pm(0.3+7\%Ai)$	20	0/-5V	3.25*1*0.1
NDAC05045	20-30	6	0.5	3.0	1.5	$\pm(0.3+7\%Ai)$	20	0/-5V	2.75*1*0.1
NDAC05049	34-36	6	0.5	3	1.5	$\pm(0.3+8\%Ai)$	20	0/-5V	3.25*1*0.1
NDAC05019	20-40	3	0.4	1.8	1.4	$\pm(0.2+5\%Ai)$	20	0/-5V	0.85*0.75*0.1
NDAC05020	20-40	5	0.5	1.8	1.4	$\pm(0.3+7\%Ai)$	20	0/-5V	2.35*1*0.1
NDAC05021	30-40	5	0.5	2	1.5	$\pm(0.2+7\%Ai)$	20	0/-5V	2.35*1*0.1
NDAC05064	25-50	6	0.5	3.5	1.5	$\pm(0.3+6\%Ai)$	20	0/-5V	3.1*1.05*0.1

Note: All the MMICs above are delivered with die form, packaged form is also available if required.

GaAs Digital Attenuator MMIC

TTL Driver

Item No.	Frequency (GHz)	Bits	LSB(dB)	IL(dB)	VSWR	Attenuation Accuracy	Ton/Toff(ns)	Control Input Voltage	Dimension (mm)
NDAC05061	DC-18	1	20	1.5	1.2	±1	20	TTL	0.8*1.0*0.08
NDAC05062	DC-18	6	0.5	3.5	1.2	±(0.3+5%Ai)	20	TTL	2.2*1.0*0.08
NDAC05022	DC-20	5	0.5	2.5	1.3	±(0.3+5%Ai)	20	TTL	2.0*1.15*0.1

GaAs Fixed Attenuator MMIC

Item No.	Frequency (GHz)	VSWR	Attenuation	Dimension(mm)
NDAC15001	DC-12	1.3	1/2	0.7*0.7*0.1
NDAC15002	DC-12	1.3	0-3.75	0.75*0.75*0.1
NDAC15003	DC-18	1.3	0-3.5	0.7*0.74*0.1
NDAC15004	DC-40	1.2	2/3	0.45*0.84*0.1
NDAC15005	DC-40	1.2	4/5	0.5*0.84*0.1
NDAC15006	DC-40	1.3	6/7	0.5*0.92*0.1
NDAC15007	DC-40	1.3	9/10	0.5*0.84*0.1
NDAC15009	DC-40	1.3	27/25	0.62*0.92*0.1
NDAC15010	DC-40	1.25	20/22	0.5*0.92*0.1
NDAC15011	DC-40	1.2	2	0.5*0.5*0.1
NDAC15012	DC-40	1.2	3	0.5*0.5*0.1
NDAC15013	DC-40	1.1	6	0.5*0.5*0.1
NDAC15014	DC-40	1.2	10	0.5*0.5*0.1
NDAC15015	DC-40	1.2	1	0.5*0.5*0.1

Note: All the MMICs above are delivered with die form, packaged form is also available if required.

GaAs FET Switch MMIC

Standard

Item No.	Function	Frequency (GHz)	IL(dB)	Isolation(dB)	VSWR	Ton-off (ns)	Control Input Voltage	Dimension(mm)
NDAC08001	SPDT	DC-4	0.5	35	1.2	10	0/-5V OR 5V/0V	0.7*0.7*0.1
NDAC08002	SPDT	DC-4	0.8	55	1.3	10	0/-5V	1.33*1*0.1
NDAC08005	SPST	DC-6.5	1	40	1.3	10	0/-5V	1.13*0.9*0.1
NDAC08028	SPDT	2-6.5	1.5	45	1.5	10	0/-5V	1.11*1.44*0.1
NDAC08006	SPDT	DC-10	1	50	1.3	10	0/-5V	1.45*1.44*0.1
NDAC08007	SPDT	DC-11	0.8	32	1.2	10	0/-5V	0.96*0.7*0.1
NDAC08032	SPDT	8-12	1.6	40	1.3	10	0/-5V	1.11*1.44*0.1
NDAC08011	SP3T	8-12	2	40	1.3/1.2	10	0/-5V	1.92*1.57*0.1
NDAC08033	SP3T	8-12	1.5/2.5	43	1.3	10	0/-5V	1.92*1.57*0.1
NDAC08014	SPDT	6-18	2	40	1.3	10	0/-5V	1.11*1.44*0.1
NDAC08015	SPDT	6-18	2.3	40	1.3	10	0/-5V	1.11*1.44*0.1
NDAC08008	SPST	DC-20	2	50	1.3	10	0/-5V	1.2*0.96*0.1
NDAC08009	SPDT	DC-20	1.3	40	1.3	10	0/-5V	1.05*1*0.1
NDAC08038	SPDT	25-30	0.8	23	1.3	10	0/-5V	1.55*0.8*0.08
NDAC08056	SPDT	33-37	1.5	40	1.2	10	0/-5V	1.0*1.2*0.08
NDAC08021	SPST	DC-40	0.8	40	1.3	10	TTL	1.57*0.8*0.1
NDAC08022	SPDT	DC-40	2.5	40	1.3	10	TTL	1.29*1.01*0.1
NDAC08018	SPST	20-40	0.8	25	1.5	10	0/-5V	1.2*0.72*0.1
NDAC08055	SPDT	20-40	1.8	40	1.8	10	0/-5V	1.0*1.2*0.08
NDAC08040	SPDT	29-40	1.8	30	1.5	10	0/-5V	1.2*1.2*0.1
NDAC08041	SPDT	30-40	0.8	24	1.3	10	0/-5V	1.55*0.8*0.08

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Item No.	Function	Frequency (GHz)	IL(dB)	Isolation(dB)	VSWR	Ton-off (ns)	Control Input Voltage	Dimension(mm)
NDAC08044	SP4T	DC-4	1	50	1.3	10	TTL	1.5*1.6*0.1
NDAC08047	SPDT	0.2-4	0.8	70	1.3	50	TTL	1.8*1.7*0.1
NDAC08019	SP3T	DC-18	1.7	55	1.3	10	TTL	1.55*1.5*0.1
NDAC08046	SPDT	DC-20	1.5	40	1.3	20	TTL	1*1*0.08
NDAC08050	SPDT	30-40	0.8	24	1.3	10	TTL	1*1.55*0.08

Note: All the MMICs above are delivered with die form, packaged form is also available if required.

GaAs PIN Switch MMIC

Item No.	Function	Frequency (GHz)	IL(dB)	Isolation (dB)	VSWR	Input P-1 (dBm)	Ton-off (ns)	Control Input Voltage/ Current	Dimension (mm)
NDAC13003	SPDT	22-36	1	22	1.4	33	50	5V/-12V	2.5*1.08*0.1
NDAC13004	SPDT	34-36	1.1	34	1.5	34	50	5V/-12V	2*1.08*0.1
NDAC13005	SPDT	34-37	1	23	1.3	33	50	3V/-12V	2*1*0.1
NDAC13006	SPST	20-38	1.2	30	1.5	30	20	5V/-12V	1.22*0.67*0.1

GaAs Limiter MMIC

Part Number	Frequency (GHz)	IL(dB)	VSWR	Limit Power (dBm)	MAX Input Power (W)	Dimension(mm)
NDAC12001	2.7-3.5	0.4	1.3	13.5	20	2.62*1.83*0.1
NDAC12023	2-6	0.5	1.5	18	80(Pulse)	1.5*1.3*0.1
NDAC12004	2-6	0.4	1.3	15	30(Pulse)	1.7*1.2*0.1
NDAC12025	5-6	0.7	1.7	18	100(Pulse)	2*1.5*0.1
NDAC12026	9-10	0.7	1.4	15	30(Pulse)	1.5*1.1*0.1
NDAC12027	8.5-10.5	0.9	1.6	19	50(Pulse(High Temp85°))	1.4*1.4*0.1
NDAC12035	8-12	0.8	1.8	20	100(Pulse)	2.82*2.78*0.1
NDAC12019	8-12	0.55	1.5	20	30(Pulse)	1.4*1.45*0.1
NDAC12017	6-18	0.4	1.5	22	6(Pulse)	1.62*0.74*0.1
NDAC12018	6-18	0.6	1.8	15	6(Pulse)	1.2*0.7*0.1
NDAC12022	10-18	0.8	1.8	20	20(Pulse)	1.4*1.45*0.1
NDAC12029	10-18	1	2.2	16	30(Pulse)	1.4*1.2*0.1
NDAC12014	34-36	1.5	1.6	15	2.5	2.1*1.3*0.1
NDAC12036	30-38	0.9	1.5	22	6(Pulse)	0.9*0.8*0.1

Note: All the MMICs above are delivered with die form, packaged form is also available if required.

GaAs Frequency Mixer MMIC

Item No.	RF Frequency(GHz)	IF Frequency (GHz)	Conversion Gain(dB)	LO/RF Isolation (dB)	Dimension(mm)
NDAC09001	0.5-1.5	DC-0.2	9	40	3.71*2.1*0.1
NDAC09003	1.6-4.9	DC-2.4	7	30	2.44*2*0.08
NDAC09004	1.8-5	DC-2	7	40	1.99*1.5*0.1
NDAC09006	2.5-6	0.1-1.5	8	30.0	1.88*1.64*0.1
NDAC09008	4-10	DC-3.0	7	40	1.4*0.81*0.1
NDAC09012	6-18	DC-7.0	8	30	1.4*0.8*0.08
NDAC09013	6-18	DC-3.0	7	35	1.5*1.2*0.1
NDAC09014	9-23	DC-8.0	8	30	1*0.9*0.08
NDAC09015	19-40	DC-18.0	9	30	1*0.8*0.08

GaAs Digital Time Delayer MMIC

Standard

Item No.	Frequency (GHz)	Bits	RMS Time Delay Error(PS)	IL(dB)	Δ IL(dB)	VSWR	Control Input Voltage	Step	Dimension (mm)
NDAC04019	0.5-6	8	$\pm(T*8\%)$	16.0	± 1	1.4	0V/-5V	5ps	5.5*3.5*0.1
NDAC04002	8-12	3	10PS	12.0	± 0.3	1.4	0V/-5V	1 λ	3.4*3.1*0.1
NDAC04003	8-12	4	10PS	12.0	± 0.5	1.4	0V/-5V	0.25 λ	3.45*2.25*0.1
NDAC04020	8-12	6	1.5°	11.0	± 0.3	1.5	0V/-5V	5.625°	4.8*1.7*0.1
NDAC04021	32-36	1	$\pm(T*8\%)$	16.0	± 1	1.6	0V/-5V	470ps	3.2*2.9*0.08
NDAC04022	32-36	4	$\pm(T*8\%)$	26.0	± 1	1.4	0V/-5V	29.5ps	4.0*2.9*0.08

TTL Driver

Item No.	Frequency (GHz)	Bits	RMS Time Delay Error(PS)	IL(dB)	Δ IL(dB)	VSWR	Control Input Voltage	Step	Dimension (mm)
NDAC04009	8-12	3	10PS	12	± 0.5	1.4	-5V/TTL	1 λ	3.2*3.4*0.1
NDAC04031	6-18	7	10PS	20	± 1.5	1.3	-5V/TTL	6ps	6.2*2.8*0.1
NDAC04018	6-18	7	10PS	20	± 1	1.3	-5V/TTL	6ps	6.2*2.8*0.1
NDAC04033	29-31	1	$\pm(T*10\%)$	9.0	± 0.5	1.3	-5V/TTL	264ps	1.9*2.2*0.08
NDAC04034	29-31	3	$\pm(T*10\%)$	17.0	± 0.8	1.4	-5V/TTL	33ps	2.95*2.2*0.08

Note: All the MMICs above are delivered with die form, packaged form is also available if required.

GaAs Equalizer MMIC

Item No.	Frequency (GHz)	VSWR	Equalization(dB)	Dimension(mm)
NDAC21001	0.5-6	1.2	2	0.74*1.06*0.1
NDAC21002	0.5-6	1.2	3	0.74*1.06*0.1
NDAC21003	0.5-6	1.2	4	0.74*1.06*0.1
NDAC21004	0.5-6	1.2	5	0.74*1.06*0.1
NDAC21005	0.5-6	1.2	6	0.74*1.06*0.1
NDAC21006	2-6	1.2	2	0.74*1.06*0.1
NDAC21007	2-6	1.2	3	0.74*1.06*0.1
NDAC21008	2-6	1.2	4	0.74*1.06*0.1
NDAC21009	2-6	1.2	5	0.74*1.06*0.1
NDAC21010	2-6	1.2	6	0.74*1.06*0.1
NDAC21011	6-18	1.2	2	0.64*0.92*0.1
NDAC21012	6-18	1.2	3	0.64*0.92*0.1
NDAC21013	6-18	1.2	4	0.64*0.92*0.1
NDAC21014	6-18	1.2	5	0.64*0.92*0.1
NDAC21015	6-18	1.2	6	0.64*0.92*0.1
NDAC21016	6-18	1.2	7	0.64*0.92*0.1
NDAC21017	29-31	2.1	1	0.8*0.9*0.1
NDAC21018	29-31	2.1	2	0.8*0.9*0.1
NDAC21019	29-31	4.5	3	1.35*0.9*0.1

GaAs Lange Coupler MMIC

Item No.	Frequency (GHz)	IL (dB)	Max Input Power(C/W)	Dimension(mm)
NDAC18001	2-6	0.5	10W	7*1.4*0.4
NDAC18002	8-12	0.5	10W	4.7*1.5*0.4
NDAC18003	6-18	0.6	10W	4.7*1.5*0.4
NDAC18004	6-18	0.7	10W	4.7*1.8*0.4

Note: All the MMICs above are delivered with die form, packaged form is also available if required.

GaN Inter-matched Transistor

Item No.	Frequency Range (GHz)	Output power (W)	PAE (%)	Gain (dB)	Operating Voltage (V)	Operation	Package	Dimensions (mm)
NDNM01170*	0.3-0.8	100	45	10	28	CW	JF06F016	27.4*30.8*5.0
NDNM01003	0.8-2.0	50	50	10	28	CW	C164-2	24.0*17.4*5.0
NDNM01101	0.8-2.0	100	45	9	32	CW	JF06F016	30.8*27.4*5.0
NDNM01171*	0.8-2.5	20	50	10	32	CW	JF06F016	30.8*27.4*5.0
NDNM01102*	0.96-1.25	160	60	16	50	Pulse	C164-2	24.0*17.4*5.0
NDNM01172*	1-2	120	52	10	32	CW	JF06F016	30.8*27.4*5.0
NDNM01173*	1.1-1.9	50	52	10	28	CW	C164-2	24.0*17.4*5.0
NDNM01006*	1.2-1.4	130	60	14	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01104*	1.2-1.4	200	60	14	32	Pulse	C164-2	24.0*17.4*5.0
NDNM01174*	1.2-1.4	250	60	13	32	Pulse	C164-2	24.0*17.4*5.0
NDNM01175*	1.2-1.6	150	60	13	28	Pulse	C164-2	24.0*17.4*5.0
NDNM01176*	2.0-3.0	100	45	13	32	CW	JF06F016	30.8*27.4*5.0
NDNM01177*	2.0-4.0	50	45	10	28	CW	C164-2	24.0*17.4*5.0
NDNM01178*	2.0-4.0	80	45	12	32	CW	JF06F016	30.8*27.4*5.0
NDNM01179*	2.0-4.0	100	45	10	28	CW	JF06F016	30.8*27.4*5.0
NDNM01180*	2.0-6.2	80	40	8	28	CW	JF06F016	27.4*30.8*5.0
NDNM01108*	2.2-2.3	10	57	12	28	CW	C164-1	24.0*17.4*4.4
NDNM01109*	2.2-2.3	12	57	13	28	CW	C164-1	24.0*17.4*4.4
NDNM01110*	2.2-2.3	40	57	13	28	CW	C164-1	24.0*17.4*4.4
NDNM01111*	2.2-2.3	80	57	13	28	CW	C164-1	24.0*17.4*4.4
NDNM01008*	2.3-2.5	100	60	13	28	CW	C164-2	24.0*17.4*5.0
NDNM01181*	2.494-2.496	10	55	12	28	CW	C164-2	24.0*17.4*5.0
NDNM01114	2.48-2.50	80	63	13	28	CW	C164-1	24.0*17.4*4.4
NDNM01182	2.45	100	60	13	28	CW	C164-1	24.0*17.4*4.4
NDNM01116	2.7-2.9	500	55	12	50	Pulse	C164-1	24.0*17.4*4.4
NDNM01118	2.7-3.1	180	57	12	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01119	2.7-3.1	300	55	12	50	Pulse	C164-1	24.0*17.4*4.4
NDNM01183	2.7-3.1	400	55	12	50	Pulse	C164-1	24.0*17.4*4.4
NDNM01010	2.7-3.5	40	45	12	28	Pulse	C164-2	24.0*17.4*5.0
NDNM01120	2.7-3.5	60	55	12	32	Pulse	C164-2	24.0*17.4*5.0
NDNM01011	2.7-3.5	80	55	12	32	Pulse	C164-2	24.0*17.4*5.0
NDNM01121	2.7-3.5	100	55	12	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01184	2.7-3.5	120	55	12	32	200us, 20%	C164-1	24.0*17.4*4.4

Note: If not specified, the operation of pulse condition is 1 ms pulse width and 15% duty cycle.

GaN Inter-matched Transistor

Item No.	Frequency Range (GHz)	Output power (W)	PAE (%)	Gain (dB)	Operating Voltage (V)	Operation	Package	Dimensions (mm)
NDNM01012	2.7-3.5	150	55	12	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01122	2.7-3.5	250	55	12	32	200us, 20%	C164-1	24.0*17.4*4.4
NDNM01185	2.7-3.5	400	55	12	50	200us, 20%	C164-1	24.0*17.4*4.4
NDNM01013	3.0-3.4	80	60	12	28	Pulse	C164-2	24.0*17.4*5.0
NDNM01034	3.1-3.4	300	60	12	32	Pulse	C164-1	24.0*17.4*4.4
NDNM01123	3.1-3.5	100	60	12	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01124	3.1-3.5	200	60	12	32	Pulse	C164-1	24.0*17.4*4.4
NDNM01125	3.1-3.5	300	60	12	36	Pulse	C164-1	24.0*17.4*4.4
NDNM01186	3.1-3.5	400	60	12	50	Pulse	C164-1	24.0*17.4*4.4
NDNM01126*	3.3-3.7	180	60	11	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01127*	3.7-4.2	60	60	12	28	CW	C164-1	24.0*17.4*4.4
NDNM01128*	3.7-4.2	100	60	11	28	CW	C164-1	24.0*17.4*4.4
NDNM01187*	3.7-4.2	300	55	10	32	Pulse	C164-1	24.0*17.4*4.4
NDNM01035*	4.4-5.0	30	55	11	28	CW	C164-1	24.0*17.4*4.4
NDNM01130*	4.4-5.0	60	55	11	28	CW	C164-1	24.0*17.4*4.4
NDNM01131*	4.4-5.0	100	55	10	28	CW	C164-1	24.0*17.4*4.4
NDNM01014*	4.4-5.0	120	55	10	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01132*	4.4-5.0	200	55	10	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01133*	4.4-5.0	250	55	10	32	Pulse	C164-1	24.0*17.4*4.4
NDNM01188*	5.0-6.0	8	45	11	28	CW	C164-1	24.0*17.4*4.4
NDNM01189	5.0-6.0	80	45	10	28	CW	C164-1	24.0*17.4*4.4
NDNM01134*	5.3-5.9	30	55	11	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01016*	5.3-5.9	60	52	11	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01017*	5.3-5.9	120	52	10	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01037*	5.3-5.9	200	52	10	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01135	5.3-5.9	250	50	10	32	Pulse	C164-1	24.0*17.4*4.4
NDNM01190*	5.3-5.9	400	50	10	50	Pulse	C164-1	24.0*17.4*4.4
NDNM01191*	5.7-6.3	80	45	10	28	CW	C164-1	24.0*17.4*4.4
NDNM01136*	5.9-6.4	30	45	10	28	CW	C164-1	24.0*17.4*4.4
NDNM01137*	5.9-6.4	60	45	10	28	CW	C164-1	24.0*17.4*4.4
NDNM01138*	5.9-6.4	100	45	10	28	CW	C164-1	24.0*17.4*4.4
NDNM01192	6.0-8.0	20	40	9	28	CW	C164-2	24.0*17.4*5.0
NDNM01139*	6.4-7.2	25	45	9	28	CW	C164-1	24.0*17.4*4.4
NDNM01038*	6.4-7.2	80	45	9	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01140*	6.4-7.2	100	45	9	28	CW	C164-1	24.0*17.4*4.4
NDNM01039*	6.4-7.2	150	45	9	28	Pulse	C164-1	24.0*17.4*4.4

Note: If not specified, the operation of pulse condition is 1 ms pulse width and 15% duty cycle.

GaN Inter-matched Transistor

Item No.	Frequency Range (GHz)	Output power (W)	PAE (%)	Gain (dB)	Operating Voltage (V)	Operation	Package	Dimensions (mm)
NDNM01141*	6.4-7.2	200	45	9	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01193*	6.5-7.0	160	45	10	28	500us, 30%	C164-1	24.0*17.4*4.4
NDNM01142*	7.0-7.5	30	45	9	28	CW	C164-1	24.0*17.4*4.4
NDNM01143*	7.0-7.5	60	45	9	28	CW	C164-1	24.0*17.4*4.4
NDNM01144*	7.0-7.5	100	48	9	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01194*	7.1-7.3	25	45	8	28	CW	C129	21.3*13.1*5.2
NDNM01195*	7.2-7.7	60	50	8	28	CW	C164-1	24.0*17.4*4.4
NDNM01040*	7.7-8.5	70	50	8	28	CW	C164-1	24.0*17.4*4.4
NDNM01196*	8.0-8.5	60	48	8	28	CW	C164-1	24.0*17.4*4.4
NDNM01023	8.5-9.6	50	50	8	28	Pulse	C129-10	21.0*12.9*4.7
NDNM01197	8.5-9.6	50	43	8	28	CW	C164-1	24.0*17.4*4.4
NDNM01150	8.5-9.6	100	45	8	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01041	8.5-9.6	150	40	8	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01151	8.5-9.6	200	40	8	32	Pulse	C164-1	24.0*17.4*4.4
NDNM01152	8.5-10	100	40	8	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01020	9.0-10.0	60	40	8	24	Pulse	C129	21.3*13.1*5.2
NDNM01199	9.0-10.0	50	40	8	28	CW	C129-10	21.0*12.9*4.7
NDNM01021	9.0-10.0	100	40	8	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01153	9.0-10.0	150	40	8	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01154	9.0-10.0	200	40	8	32	Pulse	C164-1	24.0*17.4*4.4
NDNM01301	9.5-10.5	70	35	8	28	CW	C164-1	24.0*17.4*4.4
NDNM01302	9.5-10.5	150	38	8	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01043	9.5-10.5	200	38	8	32	Pulse	C164-1	24.0*17.4*4.4
NDNM01157*	9.5-11	100	35	8	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01303*	10.0-10.4	70	32	7.5	28	CW	C164-2	24.0*17.4*5.0
NDNM01158	11.2-11.8	60	33	7	28	Pulse	C129	21.3*13.1*5.2
NDNM01044	11.2-11.8	200	33	7	32	Pulse	C164-1	24.0*17.4*4.4
NDNM01045	11.8-12.2	65	33	7	28	Pulse	C129	21.3*13.1*5.2
NDNM01046	11.8-12.2	200	30	6.5	32	Pulse	C164-1	24.0*17.4*4.4
NDNM01159*	13.1-13.3	120	30	6	28	Pulse	C164-1	24.0*17.4*4.4
NDNM01160*	13.7-14.2	60	30	6	28	Pulse	C129	21.3*13.1*5.2
NDNM01161*	13.75-14.5	50	30	6	28	CW	C129	21.3*13.1*5.2
NDNM01304*	14.9-15.1	6	30	5	28	CW	C129-10	21.0*12.9*4.7
NDNM01305*	14.9-15.1	20	30	5	28	CW	C129-10	21.0*12.9*4.7

Note: If not specified, the operation of pulse condition is 1 ms pulse width and 15% duty cycle.

GaN Pre-matched Transistor

Item No.	Frequency Range (GHz)	Output power(W)	PAE (%)	Gain (dB)	Operating Voltage(V)	Operation	Package	Dimensions (mm)
NDNM01230*	DC-6	50	55	13	28	CW	JY02F002	20.32*5.84*5.0
NDNM01231*	0.14-0.27	400	68	17	50	Pulse	JY04F503	41.1*10.1*3.4
NDNM01201*	0.35-0.45	1300	68	19	50	Pulse	JY04F503	41.1*10.1*3.4
NDNM01232*	0.3-2.0	100	50	9	28/-2.6	CW	JY02F015	26.1*10.2*3.7
NDNM01204	0.425-0.475	700	75	19	50	Pulse	JY04F503	41.1*10.1*3.4
NDNM01205	0.425-0.475	1300	72	18	50	Pulse	JY04F503	41.1*10.1*3.4
NDNM01233	0.41-0.48	1500	72	18.5	60	Pulse	JY04F503	41.1*10.1*3.4
NDNM01203*	0.41-0.61	450	68	17	36	1.3ms, 35%	JY04F503	41.1*10.1*3.4
NDNM01206*	0.48-0.61	600	70	17	50	1ms, 25%	JY04F503	41.1*10.1*3.4
NDNM01208*	0.96-1.25	250	65	15	50	Pulse	JY02F015	26.1*10.2*3.7
NDNM01210*	0.96-1.25	350	65	15	50	Pulse	JY02F015	26.1*10.2*3.7
NDNM01209*	0.96-1.25	300	55	13	50	CW	JY02F008	34.0*9.8*3.7
NDNM01211*	0.96-1.25	650	65	15	50	Pulse	JY02F019	29.3*10.2*3.7
NDNM01234*	0.96-1.25	800	65	15	50	Pulse	JY02F019	29.3*10.2*3.7
NDNM01030	1.2	80	72	14	28	CW	JY02F005	22.8*10.1*3.2
NDNM01235	1.2-1.3	500	72	15	50	Pulse	JY02F015	26.1*10.2*3.7
NDNM01214*	1.2-1.4	250	65	14	50	3ms, 300us	JY02F019	29.3*10.2*3.7
NDNM01215	1.2-1.4	400	65	15	50	6ms, 30%	JY02F015	26.1*10.2*3.7
NDNM01216*	1.2-1.4	500	68	15	50	Pulse	JY02F015	26.1*10.2*3.7
NDNM01217	1.2-1.4	650	68	15	50	Pulse	JY02F019	29.3*10.2*3.7
NDNM01218	1.3-1.5	400	68	15	50	Pulse	JY02F019	29.3*10.2*3.7
NDNM01219	1.3-1.5	650	68	15	50	Pulse	JY02F019	29.3*10.2*3.7
NDNM01213	1.6	80	70	12	28	CW	JY02F005	22.8*10.1*3.2
NDNM01222*	2.494-2.496	40	55	11.5	28	CW	H102-11	22.9*9.9*5.5

Note: If not specified, the operation of pulse condition is 1 ms pulse width and 15% duty cycle.

GaN High Gain Power Amplifier

Item No.	Frequency Range (GHz)	Output power(W)	PAE (%)	Gain (dB)	Operating Voltage(V)	Operation	Package	Dimensions (mm)
NDNM02140*	0.35-0.45	10	55	20	28	CW	JF04F001	18.7*22.0*4.8
NDNM02101*	0.3-2.0	10	30	26	28	CW	JF06F016	30.8*27.4*5.0
NDNM02141*	0.3-2.0	20	30	26	28	CW	JF06F016	30.8*27.4*5.0
NDNM02103*	0.41-0.61	10	50	35	36	1.3ms, 35%	C164-2	24.0*17.4*5.0
NDNM02142*	0.48-0.61	25	50	38	50	1ms, 25%	C164-2	24.0*17.4*5.0
NDNM02001	0.8-2.0	10	50	26	28	CW	JF04F002	18.0*12.9*4.7
NDNM02104*	0.96-1.25	5	60	27	50	CW	C164-2	24.0*17.4*5.0
NDNM02105*	0.96-1.25	16	60	27	50	CW	C164-2	24.0*17.4*5.0
NDNM02143*	1.16-1.36	20	60	24	28	3ms, 300us	C164-2	24.0*17.4*5.0
NDNM02144	1.2-1.3	5	40	37	28	CW	C164-2	24.0*17.4*5.0
NDNM02145*	1.2-1.4	30	65	14	45/-5.0	Pulse	C164-2	24.0*17.4*5.0
NDNM02146*	1.2-1.4	50	60	27	50/-2.6	Pulse	C164-2	24.0*17.4*5.0
NDNM02106*	1.2-1.6	5	50	24	28	CW	JF04F002	18.0*12.9*4.7
NDNM02107	1.2-1.6	10	50	24	28	CW	JF04F002	18.0*12.9*4.7
NDNM02022	1.2-1.4	20	50	24	28	CW	JF04F002	18.0*12.9*4.7
NDNM02108*	1.8-2.1	15	50	25	28	Pulse	C164-2	24.0*17.4*5.0
NDNM02147*	2.0-2.4	12.5	55	12	28	CW	C164-2	24.0*17.4*5.0
NDNM02148*	2.05-2.25	5	35	27	28	CW	C164-2	24.0*17.4*5.0
NDNM02109	2.2-2.3	6	60	38	28	CW	JF04F002	18.0*12.9*4.7
NDNM02024*	2.2-2.3	8	50	35	28	CW	JF04F002	18.0*12.9*4.7
NDNM02110*	2.2-2.3	16	50	34	32	CW	C164-2	24.0*17.4*5.0
NDNM02149*	2.3	8	60	14	28	CW	C164-2	24.0*17.4*5.0
NDNM02150*	2.3	80	60	10	28	CW	C164-2	24.0*17.4*5.0
NDNM02151*	2.3	100	60	11	28	CW	C164-2	24.0*17.4*5.0
NDNM02152	2.7-2.9	200	50	15.5	36	Pulse	Plate	76.0*53.0*6.0
NDNM02153	2.7-2.9	280	50	8.5	36	Pulse	Plate	76.0*53.0*6.0
NDNM02111*	2.7-3.0	100	56	25	32	Pulse	JF06F016	30.8*27.4*5.0
NDNM02026	2.7-3.0	180	56	42	28	Pulse	JF05F007	45.0*25.0*4.8
NDNM02112	2.7-3.1	16	55	25	28	Pulse	JF04F002	18.0*12.9*4.7
NDNM02002*	2.7-3.5	10	50	23	28	Pulse	JF04F002	18.0*12.9*4.7
NDNM02113*	2.7-3.5	16	50	25	28	Pulse	JF04F002	18.0*12.9*4.7
NDNM02114*	2.7-3.5	130	50	41	32	Pulse	JF05F010	45.0*25.0*5.0
NDNM02154*	2.7-3.5	180	50	42	32	Pulse	JF05F010	45.0*25.0*5.0
NDNM02155*	2.7-3.5	400	45	36	50	Pulse	JF05F016	25.0*45.0*5.5
NDNM02156*	2.8-3.1	130	57	16	34	Pulse	Plate	58.0*40.0*6.04
NDNM02157	2.8-3.1	200	57	12	28	Pulse	Plate	39.8*29.8*6.0

Note: If not specified, the operation of pulse condition is 1 ms pulse width and 15% duty cycle.

GaN High Gain Power Amplifier

Item No.	Frequency Range (GHz)	Output power(W)	PAE (%)	Gain (dB)	Operating Voltage(V)	Operation	Package	Dimensions (mm)
NDNM02158	2.8-3.1	200	57	12	34	Pulse	Plate	74.8*59.5*6.04
NDNM02115*	3.0-3.5	16	50	25	28	Pulse	JF04F002	18.0*12.9*4.7
NDNM02117*	3.1-3.4	200	57	45	32	Pulse	JF05F009	30.0*24.5*4.6
NDNM02116*	3.1-3.5	5	38	27	28	CW	C164-2	24.0*17.4*5.0
NDNM02159	3.1-3.5	80	52	43	32	Pulse	JF05F009	30.0*24.5*4.6
NDNM02160*	3.1-3.5	200	57	12	28	Pulse	Plate	39.8*29.8*6.0
NDNM02161*	4.3-4.8	12	40	20	28	CW	JF04F002	18.0*12.9*4.7
NDNM02162*	4.45-4.85	200	45	22	28	Pulse	JF06F026/JF06F027	40.1*21.5*4.55
NDNM02119*	4.4-5.0	12	45	20	28	CW	JF04F002	18.0*12.9*4.7
NDNM02163*	4.4-5.0	20	40	20	28	CW	JF06F016	30.8*27.4*5.0
NDNM02120*	4.4-5.0	25	45	20	28	CW	JF04F002	18.0*12.9*4.7
NDNM02164*	4.5-4.9	30	55	12	28	Pulse	Plate	69.8*39.8*6.0
NDNM02121*	4.5-4.9	80	55	45	28	Pulse	JF05F007	45.0*25.0*4.8
NDNM02165*	4.5-4.9	200	52	12	28	Pulse	Plate	39.8*29.8*6.0
NDNM02122*	5.3-5.9	12	40	30	28	Pulse	C164-2	24.0*17.4*5.0
NDNM02166	5.3-5.9	15	45	30	28	CW	JF04F002	18.0*12.9*4.7
NDNM02123*	5.9-6.4	25	45	20	28	CW	JF04F002	18.0*12.9*4.7
NDNM02036*	6.4-7.2	10	45	20	28	CW	JF04F002	18.0*12.9*4.7
NDNM02124*	6.4-7.2	25	45	20	28	CW	JF04F002	18.0*12.9*4.7
NDNM02167	7.2-7.7	16	42	20	28	CW	C164-2	24.0*17.4*5.0
NDNM02125*	7.7-8.5	12	35	23	28	Pulse	JF06F007	18.0*8.7*2.2
NDNM02126*	7.7-8.5	25	35	23	28	Pulse	JF06F007	18.0*8.7*2.2
NDNM02168*	8.0-8.5	16	40	20	28	CW	C164-2	24.0*17.4*5.0
NDNM02169*	8.5-9.5	30	25	43	28	Pulse	Shell	25.97*10.4*8.0
NDNM02127*	8.5-9.6	0.5	25	22	28	Pulse	JF06F007	18.0*8.7*2.2
NDNM02128*	8.5-9.6	25	35	20	28	Pulse	JF06F007	18.0*8.7*2.2
NDNM02129*	8.5-9.6	40	35	20	28	Pulse	JF06F007	18.0*8.7*2.2
NDNM02130*	9.0-10.0	15	45	20	28	Pulse	JF06F007	18.0*8.7*2.2
NDNM02131*	9.0-10.0	25	25	41.5	28	Pulse	Shell	25.97*10.4*8.0
NDNM02132*	9.0-10.0	40	35	20	28	Pulse	JF06F007	18.0*8.7*2.2
NDNM02133*	9.0-10.5	25	35	20	28	Pulse	JF06F007	18.0*8.7*2.2
NDNM02170*	10.8-11.8	80	35	15	28	250us, 30%	Shell	30.0*28.0*7.8

Note: If not specified, the operation of pulse condition is 1 ms pulse width and 15% duty cycle.

GaN Plate Carrier Power Amplifier

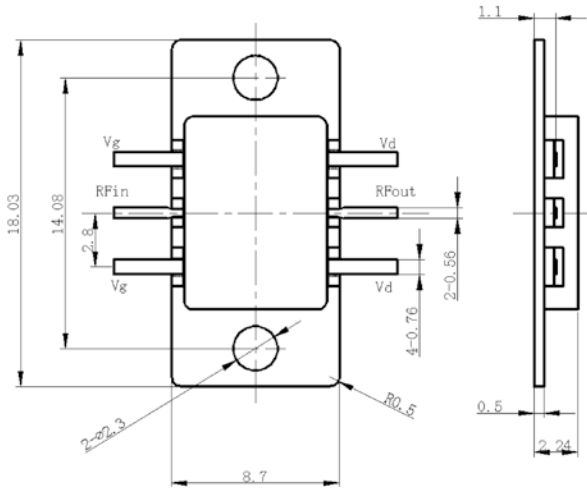
Item No.	Frequency Range (GHz)	Output power (W)	PAE (%)	Gain (dB)	Operating Voltage (V)	Operation	Package	Dimensions (mm)
NDNM03001	0.425-0.475	50	60	27	50	Pulse	Plate	11.0*16.0*0.5
NDNM03002*	0.96-1.25	10	50	30	36	Pulse	Plate	17.0*17.4*1.0
NDNM03003*	0.96-1.25	80	60	30	50	Pulse	Plate	17.0*17.4*1.0
NDNM03004*	0.96-1.25	130	55	14	36	Pulse	Plate	17.0*17.4*1.0
NDNM03005	1.2-1.4	65	65	24	28	Pulse	Plate	11.0*16.0*0.5
NDNM03006*	1.3-1.5	80	58	29	50	Pulse	Plate	11.0*16.0*0.5
NDNM03008*	2.7-3.1	250	55	12	50	Pulse	Plate	11.0*20.0*0.5
NDNM03009*	2.7-3.5	8	30	18	28	Pulse	Plate	8.4*10.0*1.0
NDNM03030*	2.7-3.5	40	50	25	48	Pulse	Plate	6.5*8.0*0.5
NDNM03010*	2.7-3.5	60	50	9	28	Pulse	Plate	6.6*15.0*1.0
NDNM03011	2.7-3.5	130	55	10	32	Pulse	Plate	11.0*20.0*0.5
NDNM03031	2.7-3.5	250	55	12	50/-5	Pulse	Plate	20.0*11.0*0.50
NDNM03012*	3.1-3.4	150	60	31	32	Pulse	Plate	13.0*13.0*1.0
NDNM03013*	4.4-5.0	60	50	28	28	Pulse	Plate	10.0*16.0*0.5
NDNM03014	5.0-6.0	80	55	25	28	Pulse	Plate	8.0*12.0*1.0
NDNM03031	5.2-5.9	50	50	28	28	Pulse	Plate	12.0*20.0*0.5
NDNM03032	5.2-5.9	100	50	26	28	Pulse	Plate	12.0*20.0*0.5
NDNM03033	5.2-5.9	200	45	26	28	Pulse	Plate	12.0*20.0*0.5
NDNM03034*	5.3-5.9	25	50	20	28	1ms, 35%	Plate	8.0*12.0*1.5
NDNM03015*	5.3-5.9	25	53	20	28	CW	Plate	12.0*20.0*0.5
NDNM03016*	6.4-7.2	16	40	9	28	CW	Plate	10.0*12.0*1.2

GaN Transmitting Module

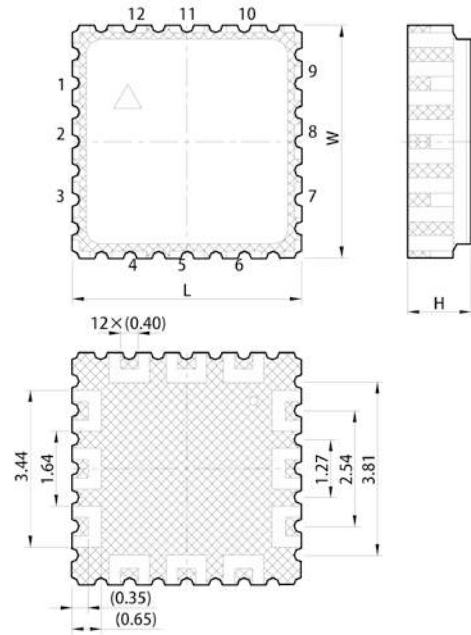
Item No.	Frequency Range (GHz)	Output power (W)	PAE (%)	Gain (dB)	Operating Voltage (V)	Operation	Package	Dimensions (mm)
NDNM04001	0.35-0.45	80	40	39	50	Pulse(200us,15%)	Aluminum Shell	85.0*30.0*10.0
NDNM04002	0.4-0.48	120	60	46	24	Pulse(100us,10%)	Aluminum Shell	35.0*65.0*7.0
NDNM04003	0.4-0.48	200	60	30	36	Pulse(100us,20%)	Aluminum Shell	35.0*65.0*7.0
NDNM04004	1.2-1.4	250	50	42	32	Pulse(300us,10%)	Aluminum Shell	120.0*55.0*19.0
NDNM04005	1.2-1.4	650	60	14	50	Pulse(350us,12%)	Plate	70.0*45.0*5.4

Note: If not specified, the operation of pulse condition is 1 ms pulse width and 15% duty cycle.

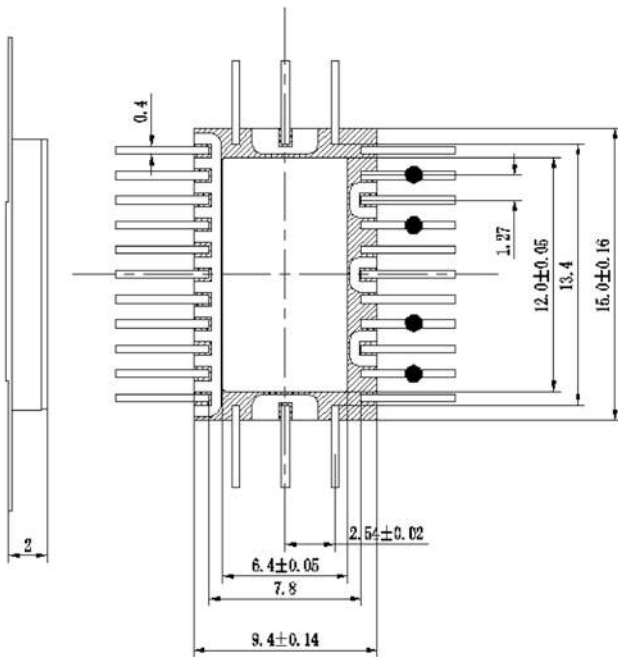
Package for MMIC (Unit:MM)



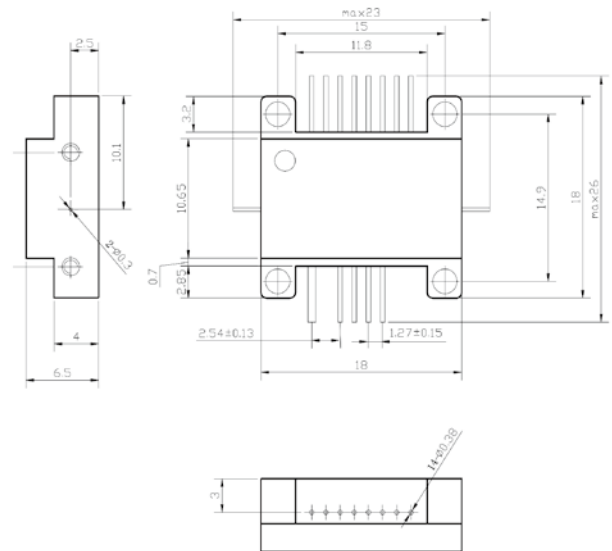
JF06F007



QFN 5X5

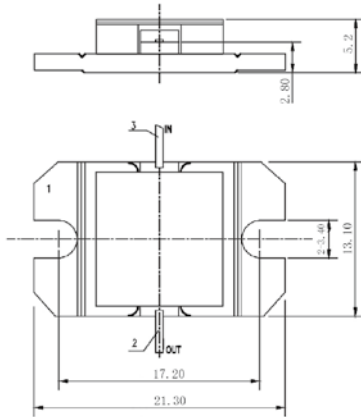


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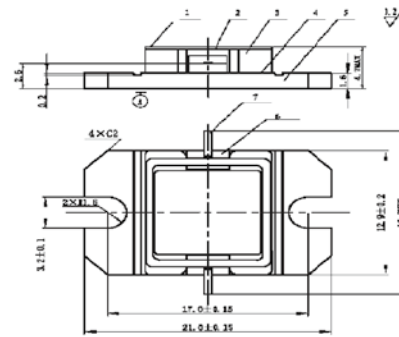


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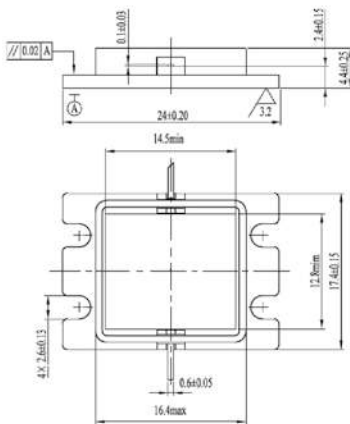
Package for Transistor and MCM (Unit:MM)



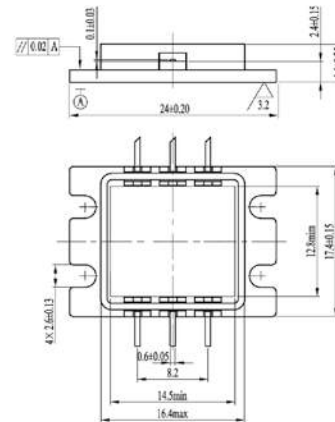
C129



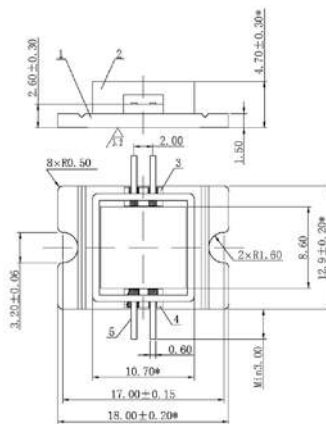
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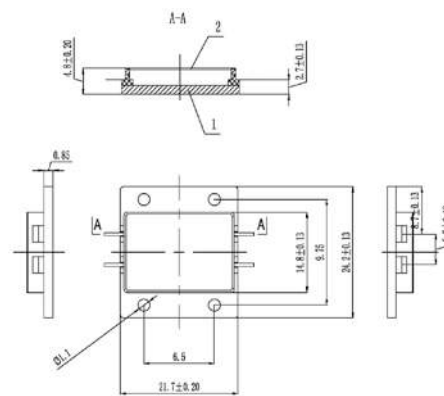
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C164-2

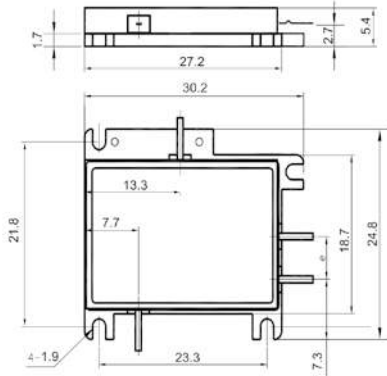


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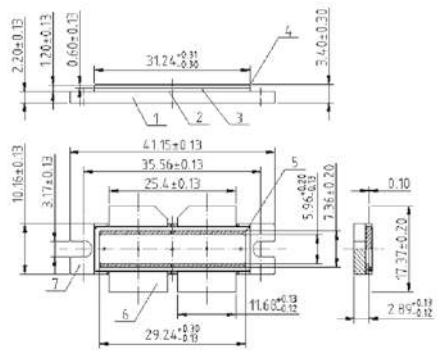


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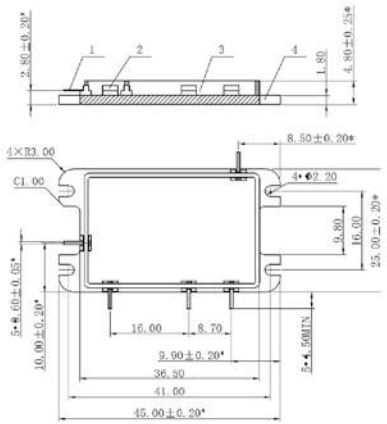
Package for Transistor and MCM (Unit:MM)



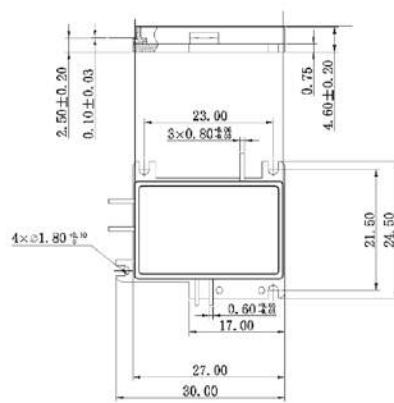
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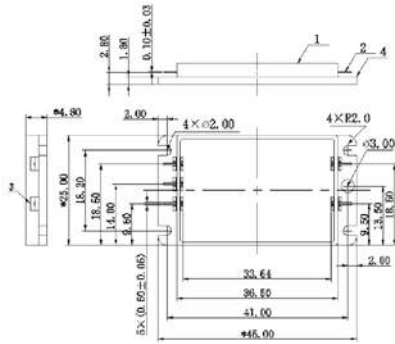
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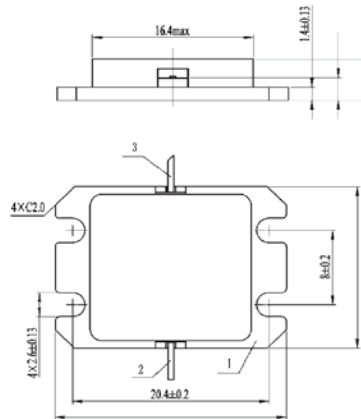
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JF05F010



JF06F016

(Unit:MM)



RF Switch for Base Station and Terminal

Item No.	Frequency (GHz)	Type	IL (dB)	Isolation (dB)	IP/OP VSWR	IP3 (dBm)	P1dB (dBm)	Package Type
NDRC01001	0.5-2.5	SPST	0.8	47	1.5:1	40	28	SOIC-8
NDRC01002	DC-3.0	SPDT	0.3	27	1.2:1	50	32	SC70-6
NDRC01003	DC-2.5	SPDT	0.4	24	1.2:1	--	37	SOT-6
NDRC01004	DC-4.0	SPDT	0.9	40	1.3:1	38 (3V) 46 (5V)	21 (3V) 27 (5V)	MSOP-8
NDRC01005	DC-5.0	SPDT	0.9	65	1.3:1	52	30	QFN 4x4-16L
NDRC01006	DC-4.0	SPDT	0.9	50	1.3:1	38 (3V) 46 (5V)	21 (3V) 27 (5V)	MSOP-8EP
NDRC01007	DC-2.5	SP4T	0.4	2.7	1.2:1	55	37	QFN 3x3-16L
NDRC01008	DC-6.0	SP3T	0.6	27	1.2:1	50	29 (3.3V) 19 (1.8V)	QFN 1.5x1.5-8L
NDRC01009	DC-3.0	SP3T	0.45	27	1.2:1	60	33	QFN 2.5x2.5-12L
NDRC01010	DC-4.0	SPDT	0.3	25	1.2:1	46	21	QFN 1x1-6L
NDRC01011	DC-6.0	SPDT	0.3	25	1.2:1	50 (3V)	30	QFN 1x1-6L
NDRC01012	DC-2.5	SPDT	0.4	24	1.2:1		37	QFN 2x2-6L
NDRC01013	DC-3.0	SPDT	0.7	65	1.3:1	54	30	QFN 4x4-20L
NDRC01014	DC-6.0	SPDT	1.0	55	1.2:1	55	33	QFN 4x4-20L
NDRC01015	DC-5.0	SPDT	0.6	32	1.2:1	60	40	QFN 3x3-12L
NDRC01016	DC-6.0	SPDT	0.3	25	1.1:1	53	35	QFN 2x3-6L
NDRC01017	DC-6.0	SPDT	0.5	28	1.2:1	--	37	QFN 1.5x1.5-6L
NDRC01018	0.4-3.0	DP4T	0.4	27	1.2:1	45	20	QFN 1.1x1.5-10L

Gain Block Amplifier

Item No.	Frequency GHz	Gain (dB)	Noise Figure(dB)	Operating Voltage (V)	Operating Current (mA)	P1dB (dBm)	OIP3 (dBm)	Package Type
NDRC02001	DC-4.5	16.3	3.6	5	75	18.9	32	SOT89
NDRC02002	DC-3.5	19.6	3	5	80	19.5	32.5	SOT89
NDRC02003	DC-4.5	14	4	5	81	18	32	SOT89
NDRC02004	DC-4.0	18.5	4.8	5	48	12.9	25.4	SOT89
NDRC02005	0.05-0.85	15.5	3.3	5	95	19	40	SOT89
NDRC02006	0.05-0.85	23	3	5	98	21	40	SOT89
NDRC02007	0.4-3.5	21	4.5	5	125	28	44	SOT89
NDRC02008	0.05-1.0	17	2	8 TM	125	26	43	SOT89

Digital Control Attenuator

Item No.	Bits	Frequency (GHz)	IL (dB)	Max. Atten. (dB)	IP3 (dBm)	Stepping (dB)	Control Interface	Package Type
NDRC03001	6	DC-3.8	1.5	31.5	45	0.5	Parallel	QFN4x4-24L
NDRC03002	6	DC-1.2	1.3	31.5	54	0.5	Serial	QFN4x4-20L
NDRC03003	6	DC-5.0	1.2	31.5	58	0.5	Dual	QFN4x4-24L

Low Noise Amplifier

Item No.	Frequency (GHz)	Noise Figure (dB)	IP3 (dBm)	Gain (dB)	P1dB (dBm)	Package Type
NDRC04001	0.4-1.5	0.35	34	19.5	22	TSLP 2x2-8L
NDRC04002	1.5-2.5	0.48	35	18	21	TSLP 2x2-8L

Variable Gain Amplifier

Item No.	Bits	Frequency (GHz)	Gain (dB)	Gain Range (dB)	Atten. Accuracy (dBm)	IP3 (dBm)	NF (dB)	Package Type
NDRC05001	6	DC-1.0	42.5/36	31.5	0.5	40	4	LGA 5X5-32L
NDRC05002	6	1.8-2.4	33	31.5	0.5	43	3.5	LGA 6X6-28L
NDRC05003	6	DC-1.0	45/40	31.5	0.5	40	3	QFN 5X5-32L
NDRC05004	6	0.05-4	19.5/16.5	31.5	0.5	38	6	QFN 5X5-32L



LNA Module

Item No.	Frequency (GHz)	Gain (dB)	NF (dB)	IL (dB)	Isolation (dB)	IP3 (dBm)	P1dB (dBm)	Package Type
NDRM01001	1.0-4.0	30/15	1.1	0.5	10/42	-4 (@Max Gain) 10 (@LNA bypass)	-13 (@Max Gain) 2 (@LNA bypass)	QFN 6x6-40L
NDRM01002	1.0-4.0	30	1	0.5	10/42	-4	-13	QFN 6x6-40L

High Power Switch Module

Item No.	Frequency (GHz)	IL (dB)	Isolation (dB)	IP/OP VSWR	P1dB (dBm)	Switch (ns)	Application
NDRM02001	1.8-2.7	0.6	40	1.2	43dBm	100	Base Station
NDRM02002	2.0-2.7	0.6	40	1.2	35W	500	Base Station
NDRM02003	1.8-2.8	0.4	45	1.2	60W	500	Base Station
NDRM02004	1.8-2.8	0.4	45	1.2	35W	500	Base Station
NDRM02005	0.4-1	0.4	40	1.2	43dBm	100	Base Station
NDRM02006	0.2-1	0.2	47	1.2	60W	500	Base Station
NDRM02007	1.8-2.7	0.6	45	1.2	50dBm	500	Base Station
NDRM02008	1.7-3.7	0.6	42	1.2	49dBm	500	Base Station



Serial-Parallel Converter

Item No.	Bits	Voltage (V)	I _q (mA)	Max. Frequency	Functions
NDQD0013H	12 bit	±5	<1	20MHz	CK, DA, LE, T/T, TR/EN
NDQD0015H	24 bit	±5	<1	20MHz	CK, DA, LE, 0V~5V, single output
NDQD0016H	30 bit	±5	<1	40MHz	SEL, CK, DA, DARY, TR
NDQD0022H	6 bit	±5	<0.1	40MHz	CK, DA, LE, P/S compatible, cascable
NDQD0023H	26 bit	±5	<1	40MHz	SEL, CK, DA, DARY, TR
NDQD0024H	26 bit	±5	<1	40MHz	SEL, CK, DA, DARY, TR
NDQD0027H	6 bit	±5	<1	40MHz	SEL, CK, DA, DARY
NDQD0031H*	25 bit	+5	<1	40MHz	SEL, CK, DA, DARY, TR, cascable, 0V~5V, single output
NDQD0032H	6 bit	-5	<1	30MHz	SEL, CK, DA, DARY, single negative voltage supply, cascable
NDQD0033H	12 bit	-5	<1	30MHz	SEL, CK, DA, DARY, single negative voltage supply, cascable
NDQD0039H*	25 bit	+5	<1	40MHz	SEL, CK, DA, DARY, TR, cascable, 0V~5V, single output
NDQD0054H	36 bit	±5	<1	20MHz	SEL, CK, DA, DARY, TR/P
NDQD0059H	6 bit	3.3-5V	<2	20MHz	PS, CK, DA, LE, Single positive voltage supply, P/S compatible, cascable
NDQD0064H	6 bit	±5	<0.3	40MHz	
NDQD0056H	24 bit	±5	<1	10Mhz	

Note : 1. All serial/parallel circuit control chips are compatible with TLL/CMOS electrical level.

2. The parts with * are single 0V~5V output, the other parts are -5V~0V output.

Time Delayer

Item No.	Voltage (V)	Current (mA)	Max. Frequency	Control Port	Delay Value			
					t ₁ (n)	t ₂ (n)	t ₃ (n)	t ₄ (n)
NDQD0010H	5	<1	1MHz	3	1000	420	580	970
NDQD0012H	5	<1	1Mhz	4	310	30	30	260
NDQD0017H	5	<1	1Mhz	4	83	30	30	210
NDQD0048H	5	<1	1Mhz	4	83	30	30	210

Note: All input voltage is compatible with TTL/CMOS, output is CMOS

Driver

Item No.	Channel	Voltage (V)	Iq (mA)	Max. Frequency	Output Electrical Level	Function
NDQD0014H	1	±5	<1mA	20Mhz	-5V~0V	
NDQD0028H	6	±5	<1mA	20Mhz	-5V~0V	Combiner driver
NDQD0036H	6	-5	<1mA	20Mhz	-5V~0V	Parallel combiner driver
NDQD0042H	1	-5V/-40V	<50μA	10MHz	-40V~0V	Compatible -40V~-20V
NDQD0045H	4 TTL	+5	<100μA	20MHz	CMOS	4 channel TTL driver
NDQD0053	2	+5	<250μA	50KHz	-5V~0V	2 channel parallel driver

Note: All drivers are compatible with TTL/CMOS electrical level.

Decoder

Item No.	Decode	Voltage (V)	Iq (mA)	Max. Frequency	Output Electrical Level	Function
NDQD0018H	4~16	±5	<1mA	20MHz	-5V~0V	
NDQD0020H	2~4	±5	<1mA	20MHz	-5V~0V	Combiner driver
NDQD0021H	3~8	-5	<1mA	20MHz	-5V~0V	Parallel combiner driver
NDQD0029H	3~8	+5	<1mA	20MHz	CMOS	

PIN Driver

Item No.	Description	Voltage	Iq	Max. Frequency	Output Electrical Level	Equivalent On Resistance	Max. Current
NDQD0034H	Dual channel	+8V	< 1mA	1MHz	-5V~+8V	17 Ω	80 mA
		-5V					
NDQD0035H	-12V Single Channel	+5V	< 1mA	2MHz	-12V~+5V	30 Ω	80 mA
		-12V					
NDQD0050H	28V Single Channel	+5V	< 1mA	2MHz	0V~+28V	15 Ω	150 mA
		+28V					

Note: All drivers are compatible with TTL/CMOS electrical level.

Gate Voltage Bias Circuit

Item No.	Description	Input Step	Load-bearing Ability	Supply Voltage	Quiescent Current	Output Voltage (V)
NDQD0057H	-0.5V-1.2V	50mV	±80mA	-5V	0.6mA	'-0.5/-0.55/-0.6/-0.65/-0.7/-0.75/-0.8/-0.85/-0.9/-0.95/-1/-1.05/-1.1/-1.15/-1.2
NDQD0058H	GaN -2.2V~-3.5V	100mv	±100mA	-5V	5mA	'-2.2/-2.3/-2.4/-2.5/-2.6/-2.7/-2.8/-2.9/-3.0/-3.1/-3.2/-3.3/-3.4/-3.5
NDQD0060H	Dual channel GaN -2.2V~-3.5V	100mv	±100mA	-5V	10mA	'-2.2/-2.3/-2.4/-2.5/-2.6/-2.7/-2.8/-2.9/-3.0/-3.1/-3.2/-3.3/-3.4/-3.5
NDQD0071H	GaN -2.2V~-3.5V	50mv	±100mA	-5V	1mA	'-1.6/-1.7/-1.8/-1.9/-2.0/-2.1/-2.2/-2.3/-2.4/-2.5

Item No.	Description	Input Level	Working Frequency	Supply Voltage	Quiescent Current	Others
NDQD0061H	Power supply modulation	5V CMOS	1MHz	28V	5mA	Output level 28V/18V, with integrated leak circuit, provide 3 negative voltage monitoring

Our products

MMIC

Transistor

MCM

SAW Filter & Resonator

Circulator & Isolator

MEMS Filter

Epitaxial Wafer

Package & Substrate

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Authorized Distributor Information

Note: All the data provided in this selection guide is subject to change without notice. The right is reserved to make changes to specifications and other information at any time.

