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Part #	Frequency (GHz)	Psat (dBm)	Emission Gain (dB)	Receive Gain (dB)	Emission efficiency (%)	Working mode	Current (mA)	Voltage (V)	Page
P4720	24~28	23.5	22	-	30	CW	150	5	1-227
P4721	24~28	27.5	21.5	19.5	27	CW	435	5	1-231
P4722	24~28	23.5	21.5	24	29	CW	150	5	1-235
P4803	33～37	12	12.5	21.5	-	CW	27	5	1-239
P4804C01	33～37	9.5	19	15	-	CW	31	5	1-243
P4805B01	33~37	11	20.5	19.5	-	CW	34	5	1-247

V) GaN Carrier plate Power Amplifier

Part #	Frequency (GHz)	Psat (W)	Gain (dB)	PAE (%)	Working mode	Current (A)	Voltage (V)	Page
PHT1202	1.1~1.5	25	26	53	200us/10%	1.5	40	1-251
PHT1201	1.2~1.4	400	14	61	1ms/10%	19	40	1-253
PHT1203	1.2~1.4	60	26	62	1ms/10%	3.8	28	1-255
PHT1301	2.7~3.5	400	11	52	1ms/10%	20	40	1-257
PHT1302	2.7~3.5	40	23	56	1ms/10%	2	40	1-259
PHT1401	5~6	50	24	48	1ms/10%	5	40	1-261

2、 LNA

I) GaAs LNA

Part #	Frequency (GHz)	Gain (dB)	Flatness (dB)	Noise figure (dB)	IN/OUT VSWR	P-1 (dBm)	Consumption (V/mA)	Page
P2401K01	1~9	26	±1.0	0.9	1.6/1.4	10	5/30	2-1
P2201B04	1.2～1.4	36	±0.25	0.6	1.7/1.4	11.5	5/35	2-3
P2404A01	2~4	27	±0.5	0.7	1.4/1.6	10	5/45	2-5
P2406A01	2~6	24	±1.0	0.85	1.5/1.6	13	5/47	2-7
P2401A01	2~8	24	±0.5	1.0	1.7/1.6	2	5/11	2-9
P2401C01	2~8	26.5	±0.75	1.1	1.5/1.6	10	5/30	2-11
P2901A01	2.5～11	20	±0.75	1.5	1.6/1.6	4	5/25	2-13
P2401J01	4~7	24	±0.5	0.8	1.5/1.7	13	5/40	2-15
P2401D02	5~6	24	±0.2	0.9	1.3/1.4	2	5/11	2-17
P2503C02	6～10	23	±1.0	1.2	1.3/1.4	5	5/25	2-19
P2503A01	6~12	29	±2	1.0	1.4/1.2	5	5/24	2-21
P2502B01*	7～13	28	±1.0	1.1	1.3/1.4	-1	3.3/13	2-23
P2503A02	7.5～10	27	±1.0	0.9	1.6/1.9	11	5/44	2-25
P2501E19	8~11	28.5	±0.5	1.2	1.5/1.5	2	3.3/22	2-27
P2502D04	8~12	29	±0.5	0.7	1.4/1.2	1	5/25	2-29
P2708D01	10~18	27	±0.2	1.5	1.3/1.4	8	5/40	2-31
P2708F02	14~18	29	±1.0	1.4	1.4/1.4	5	5/17	2-33
P2708F08	14~18	28	±0.5	1.0	1.3/1.3	10	5/32	2-35
P2706E04	20~24	27	±1.5	1.7	1.4/1.5	11	5/24	2-37
P2701E03	21.5~24	18	±1.0	1.8	1.5/1.5	2	5/7	2-39
P2804E01	26～28.5	28	±1.0	1.7	1.4/1.5	2	5/7	2-41
P2805F01	32~38	25	±0.4	2.0	1.5/1.5	4	5/9	2-43

Part #	Frequency (GHz)	Gain (dB)	Flatness (dB)	Noise figure (dB)	IN/OUT VSWR	P-1 (dBm)	Consumption (V/mA)	Page
P2807A03	32~38	29.5	±0.3	2.3	2.0/1.8	2	5/30	2-45
P2808A04	32~38	24	±0.5	1.7	1.4/1.2	6	5/15	2-47
P2801A07	33~37	20	±0.5	2.2	1.8/1.2	5	3.3/40	2-49

II) GaAs Limit Amplitude LNA

Part #	Frequency (GHz)	Gain (dB)	Flatness (dB)	Noise figure (dB)	IN/OUT VSWR	P-1 (dBm)	Limit Power (V/mA)	Page
PV2401B01	2~6	26	±0.5	1.3	1.7/1.4	4	40 (pulse)	2-51
PV2401C02	2.5~4	27	±0.5	1.2	1.4/1.2	4	49 (pulse)	2-53
PV2402B01	5~6	25	±0.5	1.2	1.3/1.4	10	40 (pulse)	2-55
PV2403B01	5~6	25	±0.5	1.2	1.4/1.2	7	47 (pulse)	2-57
PV2503C01	8~12	29	±0.5	2.1	1.5/1.4	-5	40 (pulse)	2-59
PVB2501B01	8~12	28	±0.5	2.1	1.3/1.3	6	44 (pulse)	2-61
PV2605A01	6~18	27	±1.5	2.0	1.7/1.9	10	37 (CW)	2-63
PV2501A01*	8~12	26	±0.5	1.6	1.4/1.6	-5	36 (CW)	2-65
PVB2601B01	9~16	29	±0.5	2.1	1.4/1.5	3	36 (CW)	2-67
PV2607A01	10~18	28	±1.0	2.1	2.0/1.9	10	42 (CW)	2-69
PV2602A01	14~18	26	±0.5	2.2	2.0/1.5	0	38 (CW)	2-71
PV2604B01	14~18	23	±0.5	1.9	1.4/1.4	10	40 (pulse)	2-73

3、Amplitude and Phase Control

I) GaAs Amplitude and phase multifunction chip

Part #	Frequency (GHz)	Insert loss (dB)	Phase shift Bits	Phase shift Step (°)	Attenua Bits	Attenua Step (dB)	In/Out VSWR	Control Mode	Control Level (V)	Page
P4505B06	7~10	14	6	5.625	6	0.5	1.3/1.3	serial	-5/0	3-1
P4703B01	18~23	11.5	6	5.625	4	0.5	1.6/1.6	parallel	-5/0	3-9
P4718A03	19～23	9/11	6	5.625	6	0.5	1.5/1.5	parallel	-5/0	3-13
P4704B01	21～24	15	6	5.625	5	0.5	1.6/1.6	parallel	-5/0	3-19
P4705B01	24.5～27.5	15	6	5.625	5	0.5	1.6/1.5	parallel	-5/0	3-23

II) GaAs SinPVe channel analog Waveforming chip

Part #	Frequency (GHz)	Emission Gain (dB)	Receive Gain (dB)	Emission P-1 (dBm)	Phase shift/Attenuation Bits	Phase shift Accuracy RMS (°)	Attenuation Accuracy RMS (dB)	Voltage (V)	Page
P4516A01*	2~12	6	14	7	6/6	3.0	0.4	±5	3-27
P4301A01	2.7~3.5	22.5	15.5	21	6/6	2.0	0.6	±5	3-33
P4401B01	5~6	13	12	14	6/6	1.2	0.2	±5	3-43
P4402B01	5~6	11	10	7	6/6	1.8	0.6	±5	3-51
P4403A01	5~6	9.5	-	16	6/6	2.5	0.6	±5	3-61
P4405A01*	5~6	20	8	23	6/6	2.5	0.3	±5	3-69
P4406B01	5~6	17.5	11.5	23	6/6	2.0	0.5	±5	3-77
P4406C01*	5~6	19	12.5	24	6/6	2.0	0.3	±5	3-87
P4509A02	8~10.5	32.5	28.5	22	6/6	3.0	0.45	±5	3-97
P4510B01*	8~12	2.5	-10	9.5	6/-	2.5	-	3.3/-5	3-107
P4502B02	8~12	12	11	11	6/6	3.0	0.4	±5	3-113
P4502C03	8~12	7	3	8	6/6	3.0	0.3	±5	3-119
P4506D01*	8~12	7	1	7	6/6	3.0	0.3	±5	3-127

Part #	Frequency (GHz)	Emission Gain (dB)	Receive Gain (dB)	Emission P-1 (dBm)	Phase shift/Attenuation Bits	Phase shift Accuracy RMS (°)	Attenuation Accuracy RMS (dB)	Voltage (V)	Page
P4512B01*	8~12	6	2	8	6/6	2.0	0.2	3.3/-5	3-137
P4501G03	8.5～10.5	10	5	7	6/6	1.5	0.4	±3.3	3-145
P4509c06	9～10.2	21	10.5	23	6/6	2.0	0.4	±5	3-153
P4601B01	14~18	19	15.5	20.5	6/6	3.0	0.6	±5	3-159
P4602C01*	14~18	7.5	2	12	6/6	3.0	0.3	±5	3-171
P4603B02*	14~18	23	9	28.5	6/6	4.0	0.3	±5	3-179
P4708B01	19~23	3	-	2	6/5	3.0	0.45	4/-5	3-187
P4707E01	22~33	11	11.5	5.5	6/5	3.0	0.45	±5	3-193
P4810B01	25~27	14.5	12.5	5.5	6/5	3.0	0.35	±5	3-203

III) GaAs Multichannel Analog Waveforming

Part #	Frequency (GHz)	Channel	Emission Gain (dB)	Receive Gain (dB)	Emission P-1 (dBm)	Phase shift/ Attenuation Bits	Phase shift/Attenuation Accuracy	Emission Current (mA)	Voltage (V)	Page
P4808C01	26~28.5	2	4.5	-	1	6/5	3.0/0.2	50	±5	3-213

IV) Si Multichannel Analog Waveforming

Part #	Frequency (GHz)	Channels	Emission Gain	Receive Gain (dB)	Emission P-1 (dBm)	Phase shift/ Attenuatio	Phase shift/Attenuation	Current (mA)	Voltage (V)	Page
X4501A03	7~12	4	3.5	-3.5	9.5	6/6	3/0.5	68	3.3/-5	3-223
X4502A03	7~12	1	13	6	9	6/6	2.5/0.2	17	3.3	3-239
X4504B01	8~12	4	0	9	-	6/6	2.4/0.25	70	±5	3-251
X4601A01	14~18	1	5	5	7	6/6	2.5/0.6	40	3.3	3-263
X4602A01	14~18	1	12	5	18	6/6	2/0.6	100	3.3	3-275
X4703B01	17~24	8	-	19	-	6/5	3/0.3	186	3.3	3-287

Part #	Frequency (GHz)	Channl	Emission Gain (dB)	Receive Gain (dB)	Emission P-1 (dBm)	Phase shift/ Attenuatio	Phase shift/Attenuation	Current (mA)	Voltage (V)	Page
X4706A01	17~24	8	-6	-	-3.5	6/4	3/0.2	70	3.3	3-297
X4705B02	24～29.5	4	25	19	18	6/6	3/0.3	252	3.3	3-307
X4805B01	25~32	8	10	-	5	6/5	3/0.5	210	3.3	3-323
X4806B01	27~30	8	-	22	-	6/4	3/0.2	160	3.3	3-333
X4804A01	32~38	1	15	15	7	5/5	4.5/0.5	229	3.3	3-343
X4802B02	32~40	4	5	16	-	7/6	4/0.6	460	3.3	3-353

V) GaAs Delay amplifier multifunction chip

Part #	Frequency (GHz)	Emission Gain (dB)	Receive Gain (dB)	Emission P-1 (dBm)	Delay Bits	Delay Step (ps)	Parasitic Amplitude modulation (dB)	Control Mode	Voltage (V)	Page
P4410A01	2~6	7.5	-	3.5	5	25	±0.8	parallel	±5	3-361
P4513C01	8~12	1.5	4	15	3	104	±0.6	parallel	3.3/-5	3-365
P4511A01	8~12	9.5	14.5	15	3	52	±0.7	parallel	3.3/-5	3-369
P4513A01	8~12	9.5	11.5	12.5	4	52	±1.0	parallel	3.3/-5	3-375
P4513B01	8~12	-1.5	-1.5	14.5	3	100	±0.6	parallel	3.3/-5	3-381
P4513D01	8~12	0.5	0.5	10	3	26	±0.4	parallel	±5	3-387
P4605A01	9~16	2.5	2	14	5	10	±1.0	parallel	3.3/-5	3-391

VI) GaAs Digital control phase shifter chip

Part #	Frequency (GHz)	Bits	Insert loss (dB)	Phase shift Step (°)	Phase shift Accuracy (°)	In/Out VSWR	Parasitic Amplitude modulation	Control Level (V)	Page
P6201A03	1.2~1.4	6	3.5	5.625	1.5	1.6/1.4	±0.2	-5/0	3-395
P6503B01	1.5~10	4	10.5	5.625	7.0	2.0/2.0	±0.75	-5/0	3-399
P6301A01	2.7~3.5	6	4.8	5.625	1.5	1.4/1.4	±0.4	-5/0	3-403
P6401C01	4~6	6	5.2	5.625	2.0	1.3/1.3	±0.2	-5/0	3-407

Part #	Frequency (GHz)	Bits	Insert loss (dB)	Phase shift Step (°)	Phase shift Accuracy (°)	In/Out VSWR	Parasitic Amplitude modulation (dB)	Control Level (V)	Page
P6501c01	6~8	6	6.2	5.625	1.5	1.3/1.3	±0.1	-5/0	3-411
P6502D02	8~12	6	7.2	5.625	2.0	1.4/1.5	±0.2	-5/0	3-415
P6603A01	10～18	6	9.0	5.625	5.0	2.0/2.0	±0.6	-5/0	3-419
P6601C01	12～15	6	8.8	5.625	2.5	1.4/1.4	±0.4	-5/0	3-423
P6602C01	14～18	6	8.8	5.625	2.5	1.4/1.4	±0.5	-5/0	3-427
P6701A01	20～23.5	6	10.3	5.625	3.0	1.7/1.5	±0.6	-5/0	3-431
P6801D02	33～38	5	8.7	5.625	3.0	1.6/1.6	±0.6	-5/0	3-435
P6803B01	33~38	5	8.5	5.625	2.5	1.6/1.6	±0.35	-5/0	3-439

VII) GaAs Digital control delayer chip

Part #	Frequency (GHz)	Bits	Insert loss (dB)	Step	Max Delay (us)	In/Out VSWR	Control Level (V)	Page
P6504A01	4~13	1	14	-	8	1.4/1.4	-5/0	3-443
P6402A01	5.1~5.7	3	9.8	0.5	3.5	1.4/1.5	-5/0	3-447

VIII) GaAs Digital control attenuator chip

Part #	Frequency (GHz)	Bits	Insert loss (dB)	Attenuation Step (dB)	Max Attenuation (dB)	In/Out VSWR	Control Level (V)	Page
P5402C03	DC~8	6	2.1	0.5	31.5	1.3/1.3	-5/0	3-451
P5501C03	DC~8	6	1.8	0.3	18.9	1.3/1.3	-5/0	3-455
P5503C03	DC~10	6	1.5	0.25	15.75	1.3/1.3	-5/0	3-459
P5201A03	0.5~4	6	1.6	0.5	31.5	1.4/1.6	-5/0	3-463
P5502C03	2~10	6	3.0	0.5	31.5	1.4/1.4	-5/0	3-467
P5601C03	6~18	6	4.0	0.5	31.5	1.8/1.5	-5/0	3-471
P5504C03	8~12	6	3.9	0.5	31.5	1.4/1.4	-5/0	3-475

Part #	Frequency (GHz)	Bits	Insert loss (dB)	Attenuation Step (dB)	Max Attenuation (dB)	In/Out VSWR	Control Level (V)	Page
P5602c03	12~18	6	4.5	0.5	31.5	1.4/1.5	-5/0	3-479
P5802B02	28~32	6	6.5	0.5	31.5	1.6/1.3	-5/0	3-483
P5801c02	30～40	5	3.4	0.5	15.5	1.5/1.5	-5/0	3-487

4、Passive chip

I) Fixed attenuator chip

Part #	Frequency (GHz)	Attenuation(dB)	In VSWR	Out VSWR	Page
K580X	DC～40	1/2/3/4/5/6/7	1.4	1.4	4-1

II) GaAs Switch chip

Part #	Frequency (GHz)	Type	Insert loss (dB)	Isolation (dBc)	On/Off VSWR	Input P-1 (dBm)	Switch Time (ns)	Control Level (V)	Page
P7401A01	DC~4	SPST	0.6	60	1.1/1.1	25	10	-3.3/0	4-5
P7402A01	DC~4	SPDT	0.5	45	1.3/1.2	25	10	-3.3/0	4-7
P7402A02	DC~4	SPDT	0.35	50	1.2/1.2	25	10	-3.3/0	4-9
P7501A01	DC~12	SPST	1.0	40	1.3/1.2	25	10	-3.3/0	4-11
P7501A02	DC~12	SPST	0.6	35	1.1/1.1	25	10	-3.3/0	4-13
P7502A01	DC~12	SPDT	1.0	40	1.4/1.4	25	10	-3.3/0	4-15
P7502A02	DC~12	SPDT	0.8	40	1.4/1.4	25	10	-3.3/0	4-17
P7503A01	DC~12	SP3T	1.3	45	1.4/1.4	25	10	-3.3/0	4-19
P7503A02	DC~12	SP3T	1.0	45	1.3/1.4	25	10	-3.3/0	4-21
P7603A01	DC~20	SP3T	2.0	45	1.5/1.2	25	10	-3.3/0	4-23
P7603A02	DC~20	SP3T	1.3	45	1.5/1.3	25	10	-3.3/0	4-25
P7504B02	2~10	SPDT	0.7	26	1.6/1.2	31	10	-12/5	4-27

III)Equalizer chip

Part #	Frequency (GHz)	Insert loss (dB)	Equilibrium range (dB)	In/Out VSWR	Page
K550X	8~12	02./0.6/1.0	1/2/3	1.2/1.2	4-29

IV) Power divider chip

Part #	Frequency (GHz)	Insert loss (dB)	Port VSWR	Isolation (dBc)	Equilibrium Range (dB)	Phase equalization (°)	Type	Page
K2504A01	2~12	1.0	1.6	20	0.1	2	0° 1/2	4-33
K2502A01	6～9.5	0.4	1.4	18	0.1	2	0° 1/2	4-35
K2503A01	7～11	0.5	1.2	15	0.1	3	0° 1/4	4-37
K2501A01	8~12	0.5	1.4	15	0.1	2	0° 1/2	4-39
K2604A01	12~20	0.4	1.4	15	0.1	1	0° 1/2	4-41
K2701A05	14~26	0.5	1.4	15	0.2	2	0° 1/2	4-43
K2802A04	25~40	0.5	1.4	20	0.2	3	0° 1/2	4-45
K3501B03	7~9.5	0.5	1.3	23	0.3	3.5	90° bridge	4-47
K3701A01	20~25	0.4	1.3	20	0.4	1	90° bridge	4-51

V) Filter chip

Part #	Frequency (GHz)	Type	Passband loss (dB)	Port VSWR	Out of band Attenuation (dBc)	Page
K4501A01	7.5~9	Bandpass	1.3	1.6	40dBe@2～2.12GHz, 30dBc@ *f*0±6GHz	4-55
K4701B05	22.3~23.1	Bandpass	1.6	1.2	30dBe@25～30GHz	4-57
K4702A01	25.5~27	Bandpass	1.7	1.2	30dBe@20~23.5GHz	4-59

VI) Directional coupler chip

Part #	Frequency (GHz)	Insert loss (dB)	Port VSWR	Coupling (dB)	Coupling flatness (dB)	Page
K3504A02	2~18	1.0	1.4	13	5	4-61

VII)Limit Amplitude chip

Part #	Frequency (GHz)	Insert loss (dB)	In/Out VSWR	Limit Power (dBm)	Limit amplitude Level (dBm)	Mode	Page
K9501A04	DC~6	0.15	1.1/1.1	40	15.5	CW	4-63
K9501c08	1~10	0.3	1.1/1.1	37	17.5	CW	4-65
K9601H01	1~20	0.4	1.2/1.2	35	16.5	CW	4-67
K9301A01	2~6	0.6	1.5/1.5	42	14.5	Pulse	4-69
K9501A08	2~18	0.5	1.3/1.3	37	15	CW	4-71
K9501A10	2~18	0.7	1.5/1.5	41	15	CW	4-73
K9401A02	5~6	0.4	1.3/1.2	47	15.5	Pulse	4-75
K9501A12	5~6	0.3	1.2/1.3	40	13.5	CW	4-77
K9502A02	5~6	0.3	1.3/1.3	37	16	CW	4-79
K9501A02	8~12	0.35	1.1/1.1	40	16	CW	4-81
K9501A03	8~12	0.4	1.2/1.1	42	16	CW	4-83
K9601E06	10~18	0.9	1.6/1.6	42	17.5	Pulse	4-85
K9801D04	32~38	0.8	1.3/1.2	30	16.5	CW	4-87