1.3 Microwave Field Effect Transistors

1.3.1 Low Noise Field Effect Transistors

Specifications / Part No.	Part No.	Frequency (GHz)	Related Gain (dB)	Noise Figure (dB)	Transconductor (mS)	P-1 (dBm)	Drain Voltage (V)	Input Power (dBm)	Gate Voltage (V)
TS-LNF6K1.8N12GE		6	12*	1.8*	30*	-	+6	+15	-6

Remark： *： typical

1.3.2 Power Field Effect Transistors

Specifications / Part No.	Transconductance	Frequency (GHz)	Psat (dBm)	PAE (%)	Operating Voltage (V)	Gate Voltage (V)	Power Dissipation (TC=+25℃) (W)
TS-PFE2.3K13G50	DX0292	2.3	≥32.8(P1dB)	≥50	10	+12	6.25
TS-PFE4K10G0	DX672	4	≥27	-	8	+12	2.4
TS-PFE8K10G40	DX0289	8	27.5*(P1dB)	40*	10	+12	3.13
TS-PFE12K7G0	CX562(K)	12	≥20	-	7	+12	1.05
TS-PFE14.5K7G30	DX0290	14.5	≥21.5(P1dB)	≥30	10	+12	0.96
TS-PFE14.5K7G38	DX0291	14.5	25.0(P1dB)*	38*	10	+12	1.56
TS-PFE2.3K11G46	DX0293	2.3	≥35.5(P1dB)	≥46	10	+12	6.25

Remark： *： typical

1.3.3 GaAs Internally Matched Power Transistors

Specifications / Part No.	Frequency (GHz)	Psat (dBm)	PAE (%)	Gain (dB)	Gain Flatness (dB)	Drain Voltage (V)	Gate Voltage (V)	Power Dissipation (TC=+25℃) (W)
PTS-GIM1.63-1.73K14G48	1.63-1.73	≥40.8	≥45	≥14.0	±0.3*	+12	-5	48
PTS-GIM2.2-2.3K13G25	2.2-2.3	≥37.8(P1dB)	≥50	≥13.8	±0.2*	+12	-5	25
PTS-GIM2.2-2.3K13G75	2.2-2.3	≥43(P1dB)	≥45	≥13	±0.3*	+12	-5	75
PTS-GIM2.2-2.3K14G50	2.2-2.3	≥41(P1dB)	≥50`	≥14.0	±0.3*	+12	-5	50
PTS-GIM2.2-2.3K14G75	2.2-2.3	41.8(P1dB) *	45*	14.0*	±0.5*	+12	-5	75
PTS-GIM3.6-4K11G25	3.6-4.0	≥35.5(P1dB)	≥40	≥11.5	±0.5*	+12	-5	25
PTS-GIM3.6-4K10G48	3.6-4.0	≥40.5(P1dB)	≥40	≥10.5	±0.5*	+12	-5	48
PTS-GIM3.6-3.8K10G54	3.6-3.8	≥42.0(P1dB)	≥40	≥10.5	±0.5*	+12	-5	54.5
PTS-GIM3.8-4K10G54	3.8-4.0	≥42.0P1dB)	≥40	≥10.5	±0.5*	+12	-5	54.5
PTS-GIM4.1-4.3K10G25	4.1-4.3	≥35.5(P1dB)	≥40	≥10.5	±0.5*	+12	-5	25
PTS-GIM4.1-4.3K10G54	4.1-4.3	≥42.0(P1dB)	≥40	≥10.5	±0.5*	+12	-5	54.5
PTS-GIM4.5-4.8K11G25	4.5-4.8	≥35.5(P1dB)	≥40	≥11.5	±0.5*	+12	-5	25
PTS-GIM9.4-9.8K7G115	9.4-9.8	≥45.5	≥35	≥7.5	±0.3*	+12	-5	115

Remark： *： typical

1.3.4 Si RF Low Noise Transistors

Specifications / Part No.	f (GHz)	VCBO (V)	fT (GHz)		Fn (dB)	Ga (dB)	Outline
TS-RFLNS06K	0.6	15	0.8		2.5	8	
TS-RFLNS04K	0.4	25	2		3.5	9	
TS-RFLNS01K	0.1	30	3.0		2.5	30	

1.3.5 Si RF Low Power Transitors

Specifications / Part No.	f (GHz)	VCBO (V)	PO (mW)		GP (dB)	η C (%)	Outline
TS-RFLNPS05K	0.5	30	100		10	25	

1.3.6 CW Power Transistors

Specifications / Part No.	hFE	VCBO (V)		CCB (pF)	Rth(j-c) (℃/W)	Outline
TS-CWPW	≥50	60		30	6.5	
TS-CWPSQ	≥50	60		30	6.5	

1.3.7 Si RF Pulse Power Transistor

Specifications / Part No.	f (GHz)	Vcc (V)	Po (W)	GP (dB)		η C (%)	tw (μs)	D (%)	Outline
TS-RFPPS3.1-3.3K	3.1~3.3	30	4.8	9.8		35	100	10	