

# Product Selection Guide

Last Updated: 2010. 3. 10.

(Low Voltage Application @ < 3.3 V)

## Gain Block Amplifiers

(If not specified, the data @ 2 GHz)

Part Number	Vd (V)	Id (mA)	S21 (dB) @ MHz					OIP3 (dBm)	OP1dB (dBm)	NF (dB)	S11 (dB)	S22 (dB)	Package	Matching Circuit Frequency (wideband internally matched)	
			900	2000	2400	2700	3500								5800
ASW114	3.1	25	19	16.4	16	15.3	13.5	10.5	18.5	11.5	3.1	-15	-14	SOT363	500 ~ 3500 MHz, 5000 ~ 6000 MHz
	3.2	37	20	17	16	15.3	13.5	10.5	26	13	3.3	-14	-15		
	3.3	53	20.5	17	16	15.5	14	11	29	14.5	3.3	-14	-16		
ASX101	2.7	38	21.5	16	13	13	-	-	29	17	3.2	-15	-15	SOT89	500 ~ 2500 MHz
ASW101	3.3	40	18	11	9.5	-	-	-	31	18	4.0	-10	-18	SOT89	500 ~ 2500 MHz
ASW103	3.3	44	17	11	9	-	-	-	31	18	3.9	-9	-15	SOT89	500 ~ 2500 MHz
ASW105	3	65	19.5	17.7	16.9	16.1	-	-	33	18	1.8	-16	-9	SOT89	500 ~ 3500 MHz
ASW234	3	53	18.8	16.5	14.8	12.5	-	-	32	17	2.2	-14	-16	SOT363	500 ~ 3500 MHz
ASL210	3.3	75	18.7	12.5	-	-	-	-	37	20	0.9	-18	-12	SOT89	824~894MHz, 1920~2170MHz
ASL19D	3	90	-	24.5	21.5	20	16	-	36	19	1.0	-18	-10	DFN6	1700 ~ 2700 MHz

## Medium Power Amplifiers

(If not specified, the data @ 2 GHz)

Part Number	Vd (V)	Id (mA)	S21 (dB) @ MHz					OIP3 (dBm)	OP1dB (dBm)	NF (dB)	S11 (dB)	S22 (dB)	Package	Matching Circuit Frequency (wideband internally matched)	
			900	2000	2400	2700	3500								5800
ASX602	3.3	580	16.5	10.5	-	-	-	-	44.5	27	5.0	-15	-10	SOIC8	900 MHz, 2000 MHz

## IF Amplifiers

(If not specified, the data @ 150 MHz)

Part Number	Vd (V)	Id (mA)	S21 (dB) @ MHz				OIP3 (dBm) @ MHz				OP1dB (dBm)	NF (dB)	S11 (dB)	S22 (dB)	Package	Matching Circuit Frequency
			70	150	300	450	70	150	300	450						
ASW101	3.3	40	25	24.5	23.5	21.5	28	29	30	30	17	3.8	-15	-13	SOT89	5 ~ 450 MHz
ASW103	3.3	44	25	24	23	21	29	30	30.5	30	17	3.8	-14	-15	SOT89	5 ~ 450 MHz
ASW114	3.2	37	21	21	21	20.5	22.5	22.5	23	23.5	12	3.2	-18	-16	SOT363	70 ~ 450 MHz
ASW105	3	65	21.0	19.5	19.0	18.5	32	32.0	33.0	33.0	17.0	2.8	-13	-14	SOT89	50 ~ 450 MHz (Data @ 150 MHz)

## Low Noise Amplifiers (Discrete)

(If not specified, the data @ 2 GHz)

Part Number	Vd (V)	Id (mA)	S21 (dB) @ MHz				NF (dB) @ MHz				OIP3 (dBm)	P1dB (dBm)	S11 (dB)	S22 (dB)	Package	Matching Frequency
			900	2000	2400	3500	900	2000	2400	3500						
AST11L	3	25	18	13	-	-	1.2	1.1	-	-	27	14	-14	-11	SOT363	
	3	10	-	-	17	-	-	-	1.3	-	17	11	-15	-14		
ASL563	3	16	-	-	19	-	-	-	1.1	-	15	11	-18	-15	SOT363	
	3	20	-	-	19	-	-	-	1.1	-	22	12	-20	-20		

## Low Noise Amplifiers (Internally Matched)

(If not specified, the data @ 2 GHz)

Part Number	Vd (V)	Id (mA)	S21 (dB) @ MHz					NF (dB) @ MHz					OIP3 (dBm)	P1dB (dBm)	S11 (dB)	S22 (dB)	Package	Matching Frequency
			900	2000	2400	2700	3500	900	2000	2400	2700	3500						
ASL226	3	8.5	34	25	21.5	-	14	1.3	1.3	1.3	-	1.8	16.5	10.5	-15	-20	SOT363	
ASL210	3.3	75	18.7	12.5	11	10	-	0.8	0.9	1.1	1.2	-	37	20	-18	-12	SOT89	
ASL19D	3	90	-	24.5	21.5	-	16	-	0.95	1.1	-	-	36	19	-18	-10	DFN6	1700 ~ 2700 MHz
ASL033	170 ~ 860 MHz	3.3	10	20.2	~	16.6	-	24~19	-	17.5	1.2	-6	-6	SOT363	DVB-T Full-band (V- & U-band)			
		3	5	17.8	~	14.3	-	15.5~17.5	-	17.5	1.3~1.4	-5	-4					
		3.3	10	20.5	-	-	-	16	-	17	1.5	-20	-10					
		3	5	18	-	-	-	18	-	13	1.6	-12	-6					
		3.3	8	20.8	~	20.6	-	18	-	19	1.4~1.7	-13	-8					
ASL033	380 ~ 430 MHz	3.6	14	22.3	~	21.8	-	21	-	18	1.4~1.7	-15	-11					

## WiBro (@ 2300 ~ 2400 MHz), WLAN (@2400 ~ 2500 MHz, @ 5000 ~ 6000 MHz)

Part Number	Frequency	Vd (V)	Id (mA)	S21 (dB)	OIP3 (dBm)	P1dB (dBm)	NF (dB)	S11 (dB)	S22 (dB)	Package	Remark
ASW114	500 ~ 3500 MHz	3.2	37	16	26.5	13.5	3.3	-15	-18	SOT363	Data at 2400 MHz
	5000 ~ 6000 MHz	3.2	37	11 ~ 10.5	25 ~ 23	13 ~ 11	-	-10	-14		S11 & S22 @ 5800 MHz
ASX101	1500 ~ 2500 MHz	3.3	40	17 ~ 12.5	28 ~ 31	16 ~ 19	2.8 ~ 3.5	-10	-11	SOT89	S11 & S22 @ 2500 MHz
	2400 ~ 2500 MHz	3.3	40	13	30	17	3.5	-18	-11.5		S11 & S22 @ 2700 MHz
ASL210	2300 ~ 2700 MHz	3.3	75	13.5 ~ 13	29	17 ~ 16	3.3 ~ 3.4	-18	-13	SOT89	
ASL210	2300 ~ 2700 MHz	3.3	75	11.5~10.0	38	20	1.0~1.2	-18	-12	SOT89	
ASL19D	1700 ~ 2700 MHz	3	90	27 ~ 20	35 ~ 37	19	0.9 ~ 1.25	-18	-10	DFN6	S11 & S22 @ 2000 MHz

## WiMAX (@ 2500 ~ 2700 MHz, 3500 ~ 3700 MHz)

Part Number	Frequency	Vd (V)	Id (mA)	S21 (dB)	OIP3 (dBm)	P1dB (dBm)	NF (dB)	S11 (dB)	S22 (dB)	Package	Remark
ASW114	500 ~ 3500 MHz	3.2	37	15.3	25	13.5	3.4	-13	-18	SOT363	Data at 2700 MHz
		3.3	53	13.5	26	14	-	-16	-18		Data at 3500 MHz
ASX101	2500 ~ 2700 MHz	3.3	40	13.5 ~ 13	29	17 ~ 16	3.3 ~ 3.4	-18	-13	SOT89	S11 & S22 @ 2700 MHz
ASL226	3500 MHz	3	8.5	14	12	6.5	1.80	-13	-13	SOT363	Data at 3500 MHz
ASL210	2300 ~ 2700 MHz	3.3	75	11.5~10.0	38	20	1.0~1.2	-18	-12	SOT89	
ASL19D	1700 ~ 2700 MHz	3	90	27 ~ 20	35 ~ 37	19	0.9 ~ 1.25	-18	-10	DFN6	S11 & S22 @ 2000 MHz
	3500 MHz	3	90	16	37.5	20	-	-18	-10		Data at 3500 MHz