

3.6.2.3 0 - 500 MHz (HF/VHF) LDMOS transistors (continued)

Type number	Product	f _{min} (MHz)	f _{max} (MHz)	P1dB (W)	Test signal performance				
					VDS (V)	η _D (%)	G _p (dB)	Test signal	Package version
BLF174XR(S)	Final	10	128	600	50	73	29	Pulsed RF	SOT1214
BLF574		10	500	600	50	70	26.5	CW	SOT539
BLF574XR(S)		10	500	600	50	74.7	24	Pulsed RF	SOT1214
BLF184XR(G)		10	600	700	50	73.5	23.9	Pulsed RF	SOT1214
BLF184XRS		10	600	700	50	73.5	23.9	Pulsed RF	SOT1214
BLP05H6700XR*		10	600	700	50	tbd	tbd	tbd	SOT1338
BLF178P		10	128	1200	50	75	28.5	Pulsed RF	SOT539
BLF578		10	500	1200	50	75	26	CW	SOT539
BLF178XR(S)		10	128	1400	50	72	28	Pulsed RF	SOT539
BLF188XR(S)		10	600	1400	50	73	24.4	Pulsed RF	SOT539
BLF188XRG		10	600	1400	50	73	24.4	Pulsed RF	SOT1248
BLF578XR(S)		10	500	1400	50	69	23.5	Pulsed RF	SOT539

3.6.2.4 2.45 GHz ISM LDMOS transistors

Type number	Product	f _{min} (MHz)	f _{max} (MHz)	P1dB (W)	Test signal performance				
					VDS (V)	η _D (%)	G _p (dB)	Test signal	Package version
BLP25M705	Driver	10	2500	5	28	50	16.4	CW	SOT1179
BLP25M805*		2400	2500	5	32	tbd	tbd	CW	SOT1371
BLP25M710		10	2500	10	28	64.5	16.2	Pulsed RF	SOT1179
BLP25M810*		2400	2500	10	32	tbd	tbd	CW	SOT1371
BLF25M612(G)		2400	2500	12	28	60	19	CW	SOT975
BLF2425M9L(S)30*		2400	2500	30	32	61	18.5	CW	SOT1135
BLM2425M7S60P*		2400	2500	60	32	45	27.5	CW	SOT1211
BLF2425M7L(S)100		2300	2400	100	28	27	18	1-c WCDMA	SOT502
BLF2425M7L(S)140		2400	2500	140	28	52	18.5	CW	SOT502
BLF2425M8L(S)140		2400	2500	140	28	56	19	CW	SOT502
BLF2425M9L(S)140*	Final	2400	2500	140	28	60	20	CW	SOT502
BLF2425M6L(S)180P		2400	2500	180	28	53.5	13.3	CW	SOT539
BLF2425M7L(S)250P		2400	2500	250	28	51	15	CW	SOT539
BLC2425M8L(S)300P*		2400	2500	300	28	51	15	CW	SOT1250

3.6.3 RF power transistors for aerospace and defense

Device naming conventions for RF power transistors for aerospace and defense

Character	Meaning
B	semiconductor die made of Si
L	high-frequency power transistor
S	S-Band frequency operation
6	LDMOS technology generation
G	H: high voltage LDMOS (50 V) G: standard LDMOS (≤ 28 V)
2731	frequency band (in 100 MHz; here: 2700-3100)
L	L = CPC
S	flange material
P	pallet
S	earless package
P1dB	P1dB power
R	enhanced ruggedness
P	push-pull device
option	gullwing shaped leads

Why choose NXP's microwave RF power transistors:

- ▶ High gain and efficiency
- ▶ Highest reliability
- ▶ Improved pulse droop and insertion phase
- ▶ Improved ruggedness - overdrive without risk to +5 dB
- ▶ Reduces component count and helps simplify L- and S-band radar design
- ▶ Very low thermal resistance design for unrivalled performance

3.6.3.1 Avionics LDMOS transistors

Type number	Product	f _{min} (MHz)	f _{max} (MHz)	P1dB (W)	Test signal performance				
					VDS (V)	η _D (%)	G _p (dB)	Test signal	Package version
BLL6H0514-25	Driver	500	1400	25	50	50	19	Pulsed RF	SOT467
BLA6G1011-200R	Final	1030	1090	200	28	65	20	Pulsed RF	SOT502
BLA6G1011L(S)-200RG		1030	1090	200	28	65	20	Pulsed RF	SOT502
BLA8G1011L-300(G)		1030	1090	300	32	56	16.5	Pulsed RF	SOT502
BLA8G1011L(S)-300(G)		1030	1090	300	32	56	16.5	Pulsed RF	SOT502
BLA6H0912-500		960	1215	500	50	50	17	Pulsed RF	SOT634
BLA6H1011-600		1030	1090	600	48	52	17	Pulsed RF	SOT539

* Check status in section 3.1, as this type is not yet released for mass production