

Transistor Cross Reference Tool

Application	Pout Max (W)	Pin Max (W)	Gain Min (dB)	Vcc (V)	η Typ (%)	Microsemi P/N	Microsemi Package	MACOM P/N	Application / Description	Min Frequency (MHz)	Max Frequency (MHz)	Pout (W)	Gain (dB)	Efficiency (%)	Bias Voltage (V)	MACOM Package	Electrical Similarity	Mechanical Similarity
IFF, DME, and TACAN	150	25	7.8	50	40	MS2393	M138	PH1090-175L	Avionics Pulsed Power Transistor 175W, 1090 MHz, 250µs Pulse, 10% Duty	1030	1090	175	8.3	55	45	P51D		
1090 MHz Transponder	0.6	0.05	10.9	18	-	MS2204	M115	MRF1000MB	Class A, Class AB Microwave Power Silicon NPN Transistor 0.7 W, 960-1215 MHz, 18V	960	1215	0.7	10	39	18	P224		
IFF, DME, and TACAN	75	13	7.6	50	--	MS2361	M115	PH1090-75L	Avionics Pulsed Power Transistor 75W, 1030-1090 MHz, 250µs Pulse, 10% Duty	1030	1090	75	9	45	45	P51H		
1090 MHz Transponder	350	70	6.9	50	40	MSC1350M	M218	PH1090-350L	Avionics Pulsed Power Transistor 350W, 1090 MHz, 250µs Pulse, 10% Duty	1030	1090	350	8	55	45	P94C		
1090 MHz Transponder	450	90	7	50	40	MSC1450M	M216	PH1090-550S	Avionics Pulsed Power Transistor 550W, 1090 MHz, 10µs Pulse, 1% Duty	1030	1090	550	7.4	55	50	P94C		
1090 MHz Transponder	600	150	6	50	35	MS2473	M112	PH1090-550S	Avionics Pulsed Power Transistor 550W, 1090 MHz, 10µs Pulse, 1% Duty	1030	1090	550	7.4	55	50	P94C		
1090 MHz Transponder	1000	208	6.8	50	43	TPR1000	55KV-1	MAPR-001011-850S00	Avionics Pulsed Power Transistor 500W, 960-1215 MHz, 10µs Pulse, 10% Duty	960	1215	500	9	45	50	P94I		
1090 MHz TCAS	400	63	8	50	45	MS2207	M216	PH1090-350L	Avionics Pulsed Power Transistor 350W, 1090 MHz, 250µs Pulse, 10% Duty	1030	1090	350	8	55	45	P94C		
1090 MHz Transponder	75	9	9.2	50	48	MS2228	M214	PH1090-75L	Avionics Pulsed Power Transistor 75W, 1030-1090 MHz, 250µs Pulse, 10% Duty	1030	1090	75	9	45	45	P51H		
1030/1090 MHz Mode-S	150	20	10	50	40	MDS150	55AW-1	PH1090-175L	Avionics Pulsed Power Transistor 175W, 1090 MHz, 250µs Pulse, 10% Duty	1030	1090	175	8.3	55	45	P51B		
1030/1090 MHz Mode-S	400	90	6.5	45	35	MDS400	55KT-1	PH1090-350L	Avionics Pulsed Power Transistor 350W, 1090 MHz, 250µs Pulse, 10% Duty	1030	1090	350	8	55	45	P94C		
1025-1150 MHz Air DME	0.6	0.05	10.8	18	--	1000MP	55FW-2	MRF1000MB	Class A, Class AB Microwave Power Silicon NPN Transistor 0.7 W, 960-1215 MHz, 18V	960	1215	0.7	10	39	18	P224		
1025-1150 MHz Air DME	2	0.3	10	35	45	1002MP	55FW-1	MRF1000MB	Class A, Class AB Microwave Power Silicon NPN Transistor 0.7 W, 960-1215 MHz, 18V	960	1215	0.7	10	39	18	P224		
1025-1150 MHz Air DME	2	0.25	9	35	35	MS2202	M115	MRF1000MB	Class A, Class AB Microwave Power Silicon NPN Transistor 0.7 W, 960-1215 MHz, 18V	960	1215	0.7	10	39	18	P224		
1025-1150 MHz Air DME	35	3	10.6	50	43	MS2553	M220	MRF10031	Microwave Power Silicon NPN Transistor 30W (peak), 960-1215MHz, 36V	960	1215	30	9	40	36	P203		
1025-1150 MHz Air DME	35	3	10.7	50	48	MS2575	M115	MRF10031	Microwave Power Silicon NPN Transistor 30W (peak), 960-1215MHz, 36V	960	1215	30	9	40	36	P203		
1025-1150 MHz Air DME	75	12	7.8	50	45	1075MP	55FW-1	PH1090-75L	Avionics Pulsed Power Transistor 75W, 1030-1090 MHz, 250µs Pulse, 10% Duty	1030	1090	75	9	45	45	P51H		
1025-1150 MHz Air DME	90	13	8.4	50	--	SD1536-03	M115	MRF1090MB	Microwave Pulse Power Silicon NPN Transistor 90W (peak), 960-1215MHz	960	1215	90	8.4	35	50	P224		
1025-1150 MHz Air DME	90	13	8.4	50	--	SD1536-08	M105	MRF1090MB	Microwave Pulse Power Silicon NPN Transistor 90W (peak), 960-1215MHz	960	1215	90	8.4	35	50	P224		
1025-1150 MHz Air DME	175	30	7.6	50	40	MSC1175M	M218	MRF1150MB	Microwave Pulse Power Silicon NPN Transistor 150W (peak), 960-1215MHz	960	1215	150	7.8	35	50	P224		
1025-1150 MHz Air DME	250	60	6.2	50	40	MS2554	M218	MRF10350	Avionics Pulsed Power Transistor 350W, 1025-1150 MHz, 10µs Pulse, 10% Duty	1025	1150	350	9	40	36	P219		
IFF, DME, and TACAN	300	70	6.3	50	35	MS2421	M103	MRF10350	Avionics Pulsed Power Transistor 350W, 1025-1150 MHz, 10µs Pulse, 10% Duty	1025	1150	350	9	40	36	P219		
1025-1150 MHz Air DME	400	90	6.5	50	--	MS2441	M112	MRF10350	Avionics Pulsed Power Transistor 350W, 1025-1150 MHz, 10µs Pulse, 10% Duty	1025	1150	350	9	40	36	P219		
960-1215 MHz Data Link	30	5	7.8	35	40	MS2213	M214	MRF10031	Microwave Power Silicon NPN Transistor 30W (peak), 960-1215MHz, 36V	960	1215	30	9	40	36	P203		
960-1215 MHz Data Link	150	26.7	7.5	35	45	MS2215	M216	MRF1150MB	Microwave Pulse Power Silicon NPN Transistor 150W (peak), 960-1215MHz	960	1215	150	7.8	35	50	P224		
960-1215 MHz TACAN	15	3	7	40	40	TAN15	55LT-1	MRF10031	Microwave Power Silicon NPN Transistor 30W (peak), 960-1215MHz, 36V	960	1215	30	9	40	36	P203		
960-1215 MHz TACAN	250	40	8	50	38	MS2267	M214	MAPRST0912-350	Avionics Pulsed Power Transistor 350W, 960-1215 MHz, 10µs Pulse, 10% Duty	960	1215	350	9.4	45	50	P94C		
960-1215 MHz TACAN	300	60	7	50	38	MS2210	M216	MAPRST0912-350	Avionics Pulsed Power Transistor 350W, 960-1215 MHz, 10µs Pulse, 10% Duty	960	1215	350	9.4	45	50	P94C		

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Ampleon/NXP P/N	Case	Voltage (V)	Pout (W)	Frequency Band	MACOM P/N	Description	Case	Voltage (V)	Pout (W)	Band Frequency	Electrical Similarity	Mechanical Similarity
BLF242	SOT123A	28	5	VHF	MRF134	Broadband RF Power FET 5.0W, to 400MHz, 28V	211-07 style 2	28	5	400MHz		
BLF244	SOT123A	28	15	VHF	MRF136	RF MOSFET Line 15W, to 400MHz, 28V	211-07 style 2	28	15	400MHz		
BLF245B	SOT279A	28	30	VHF	MRF136Y	RF MOSFET Line 30W, to 400MHz, 28V	P215	28	30	400MHz		
BLF245	SOT123A	28	30	VHF	MRF137	RF MOSFET Line 30W, to 400MHz, 28V	211-07 style 2	28	30	400MHz		
BLF145	SOT123A	28	30	HF	MRF137	RF MOSFET Line 30W, to 400MHz, 28V	211-07 style 2	28	30	400MHz		
BLF147	SOT121B	28	150	HF	MRF140	RF MOSFET Line 30W, to 400MHz, 28V	211-11 style 2	28	150	150MHz		
BLF147	SOT121B	28	150	HF	MRF141	RF Power MOSFET 150W, to 175MHz, 28V	211-11 style 2	28	150	175MHz		
BLF248	SOT262A	28	300	VHF	MRF141G	RF Power MOSFET 300W, 175MHz, 28V	375-04 style 2	28	300	175MHz		
BLF368	SOT262A	32	300	VHF	MRF141G	RF Power MOSFET 300W, 175MHz, 28V	375-04 style 2	28	300	175MHz		
BLF175	SOT123A	50	30	HF	MRF148A	Linear RF Power MOSFET 30W, to 175MHz, 50V	211-07 style 2	50	30	175MHz		
BLF177	SOT121B	50	150	HF - VHF	MRF150	RF Power MOSFET 150W, to 150MHz, 50V	211-11 style 2	50	150	150MHz		
BLF177	SOT121B	50	150	HF - VHF	MRF151	RF Power MOSFET Transistor 150 W, 50 V, 175 MHz	211-11 style 2	50	150	175MHz		
BLF278	SOT262A	50	300	HF - VHF	MRF151G	RF Power MOSFET Transistor 300 W, 50 V, 175 MH	375-04 style2	50	300	175MHz		
BLF521	SOT172D	28	2	VHF	MRF158	RF MOSFET Line 2W, 500MHz, 28V	305A-1	28	2	500MHz		
BLF546	SOT268A	28	80	500MHz	MRF166W	RF MOSFET Line 40W, 500MHz, 28V	412-01 style 1	28	40	500MHz		
BLF246	SOT121B	28	80	500MHz	MRF173	RF MOSFET Line 80W, 175MHz, 28V	211-11 style 2	28	80	175MHz		
BLF548	SOT262A	28	150	500MHz	MRF275G	RF MOSFET Line 150W, 500MHz, 28V	375-04 style2	28	150	500MHz		
BLW96/01	SOT121B	50	200	VHF	MRF448	NPN Silicon Power Transistor 250W, 30MHz, 50V	211-11 style 1	50	250	30MHz		
BLF245	SOT123A	28	30	VHF	DU2840S	RF Power MOSFET Transistor 40W, 2-175MHz, 28V	211-07 style 2	28	40	175MHz		
BLF246B	SOT161A	28	60	VHF	DU2860T	RF Power MOSFET Transistor 60W, 2-175MHz, 28V	SOT119A	28	60	175MHz		
BLF346	SOT119A	28	30	VHF	DU2860T	RF Power MOSFET Transistor 60W, 2-175MHz, 28V	SOT119A	28	60	175MHz		
BLF246	SOT121B	28	80	HF	DU2880V	RF Power MOSFET Transistor 80W, 2-175MHz, 28V	P34A	28	80	175MHz		
BLF548	SOT262A	28	150	500MHz	UF28150J	RF Power MOSFET Transistor 150W, 500MHz, 28V	P84	28	150	500MHz		