

# MA-COM Transistors, Amplifiers, and Switches



## RF POWER TRANSISTORS

MA-COM Technology Solutions offers a broad range of RF power transistor products--discrete devices, modules, and pallets from 1 MHz to 3.5 GHz. Our high power transistors are ideal for avionics, communications, radar, and industrial, scientific, and medical applications. We use gold metallization as well as aluminum fabrication processes. Our engineering team can help solve your unique requirements with custom solutions.

MA-COM Technology Solutions offers a new family of Gallium Nitride (GaN) RF power transistors and pallets. This product family targets L- and S-Band pulsed radar applications and leverages MA-COM Tech's rich heritage of providing both standard and custom solutions to meet the most demanding customer needs. Benefits of MA-COM Tech's GaN products include high breakdown voltage, superior power density, and higher and broader frequency operation than Silicon.



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MA-COM Part No.	Package	Frequency (MHz)		Output Power (W)	Efficiency (%)	Description	Price Each		
			Min.	Max.				1	10	25
937-MRF454	MRF454	Case 211-11	2	30	80	50	Bipolar	55.19	49.84	47.19
937-MRF455	MRF455	Case 211-07	2	30	60	55	Bipolar	71.06	63.95	58.62
937-MRF314	MRF314	Case 211-07	30	200	30	50	Bipolar	34.36	30.92	29.21
937-MRF392	MRF392	Case 744A-01	100	400	125	55	Bipolar	116.00	104.40	98.60
937-MRF393	MRF393	Case 744A-01	100	500	100	55	Bipolar	112.00	100.80	95.20
937-MRF422	MRF422	Case 211-11	1.5	30	150	40	Bipolar	89.08	80.17	75.72
937-MRF426	MRF426	Case 211-07	1.5	30	25	35	Bipolar	38.20	34.38	32.47
937-MRF448	MRF448	Case 211-11	2	30	250	45	BiPolar	150.24	138.97	131.46
937-UF28100V	UF28100V	22.88mm x 19.05mm	100	500	100	50	DMOS	208.70	193.12	183.24
937-UF28150J	UF28150J	34.54mm x 19.05mm	100	500	150	55	DMOS	337.76	303.98	287.10
937-UF2840G	UF2840G	20.83mm x 15.3mm	100	500	40	50	DMOS	173.98	156.58	147.88
937-MRF134	MRF134	Case 211-07	5	400	5	50	TMOS	30.88	27.79	26.25
937-MRF136	MRF136	Case 211-07	5	400	15	60	TMOS	30.88	27.79	26.25
937-MRF137	MRF137	Case 211-07	5	400	30	60	TMOS	36.00	32.40	30.60
937-MRF141G	MRF141G	Case 375-04	5	175	300	50	TMOS	219.76	197.78	186.80
937-MRF158	MRF158	Case 305A-01	5	500	2	55	TMOS	36.38	32.74	30.92
937-MRF160	MRF160	Case 249-06	5	500	4	55	TMOS	34.78	31.30	29.56
937-MRF166C	MRF166C	Case 319-07	5	500	20	50	TMOS	60.00	50.77	45.69
937-MRF171A	MRF171A	Case 211-07	100	200	45	60	TMOS	46.00	39.95	37.55
937-MRF173	MRF173	Case 211-11	5	175	80	60	TMOS	52.56	47.30	44.68
937-MRF177	MRF177	Case 744A-01	5	400	100	60	TMOS	89.68	80.71	76.23
937-MRF275G	MRF275G	Case 375-04	5	500	150	50	TMOS	186.00	167.40	158.10
937-MRF275L	MRF275L	Case 333-04	5	500	100	55	TMOS	110.00	99.00	93.50
937-MRF148A	MRF148A	Case 211-07	5	175	30	40	TMOS	59.50	56.53	53.55
937-MRF150	MRF150	Case 211-11	5	150	150	45	TMOS	66.25	59.63	53.00
937-MRF151	MRF151	26.04mm x 26.04mm	5	175	150	40	TMOS	63.60	60.42	57.24
937-MRF151G	MRF151G	Case 375-04	5	175	300	50	TMOS	181.14	163.03	153.97
937-MRF157	MRF157	Case 368-03	5	80	600	45	TMOS	567.00	510.30	481.95
937-MAGX-1220-100L00	MAGX-001220-100L00	Cu/Mo/Cu	1200	2000	100	60	GaN HEMT	418.03	380.03	352.86
937-MAGX-0035-030000	MAGX-000035-030000	Cu/Mo/Cu	30	3500	30	80	GaN HEMT	275.68	250.62	232.70

## AMPLIFIERS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	MA-COM Part No.	Package	Frequency (MHz)		Gain (dB)	Output IP3 (dBm)	Description	Price Each		
			Min.	Max.				1	10	100
937-MAAPSS0075-T3	MAAPSS0075TR-3000	PQFN-12	2400	2500	29.5	52	Power, Linear	1.71	1.43	1.28
937-MAAM-009286-T3	MAAM-009286-TR3000	SOT-89	250	4000	15.5	42	Driver Amplifier	5.40	4.50	4.05
937-MAAL-007304-T3	MAAL-007304-TR3000	SOT-26	500	3000	25.5	19	Low Noise	1.80	1.50	1.35
937-MAAPSS0071-T3	MAAPSS0071TR-3000	PQFN-12	1880	1930	26	36	DECT Power	1.29	1.08	.97
937-MAALSS0042-T3	MAALSS0042TR-3000	SOIC-8EP	1550	1600	27	13	Low Noise	2.61	2.18	1.96
937-MAAL-010705-T3	MAAL-010705-TR3000	PDFN-8	500	1600	21	32	Low Noise	5.94	4.95	4.46
937-MAAL-010706-T3	MAAL-010706-TR3000	PDFN-8	1400	4000	17.5	34.5	Low Noise	5.94	4.95	4.46

## SWITCHES

MA-COM Tech offers an extensive collection of switches covering many commercial and aerospace and defense markets. Our product portfolio has a broad frequency spectrum from DC to greater than 70 GHz. Our silicon Heterolithic Millimeter Integrated Circuit (HMIC) PIN diode process is ideal for high power and broadband switches operating up to 20 GHz. Our AlGaAs PIN diode process can extend the upper frequency range of our switch die beyond 70 GHz. Our GaAs pHEMT and MESFET technology is ideal for fast switching and low control voltage switches optimized for both narrow band and broadband applications. Our 75 ohm absorptive switches are designed specifically for demanding CATV, FTTx and DBS Infrastructure and CPE applications.



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MOUSER STOCK NO.	MA-COM Part No.	Package	Switch Configuration	Frequency (MHz)		Isolation (dB)	Input IP3 @ 500 MHz (dBm)	Description	Price Each		
				Min.	Max.				1	10	100
937-MASW-932-13560T	MASW-000932-13560T	PQFN-16	SPDT	10	4000	43	72	HMIC PIN Diode	16.32	13.60	10.88
937-MASW-936-14000T	MASW-000936-14000T	PQFN-16	SPDT	50	6000	51	72	PIN Diode	13.38	11.15	8.92
937-MASWSS0179-T	MASWSS0179TR-3000	SOT-26	SPDT	0	2000	28	52	GaAs	.63	.53	.42
937-MASWSS0157-T	MASWSS0157TR-3000	SOIC-8	SPDT	0	2500	24	45	GaAs	2.52	2.10	1.68
937-MASWSS0180-T	MASWSS0180TR-3000	SOIC-8	SPDT	0	2500	35	46	GaAs Terminated	4.23	3.53	2.82
937-MASWSS0143-T	MASWSS0143TR-3000	SOT-26	SPDT	0	3000	22	58	GaAs Broadband	1.41	1.18	.94
937-MASW-007221-T	MASW-007221-TR3000	SC-70	SPDT	0	3000	22	52	GaAs	.87	.73	.58
937-MASWSS0115-T	MASWSS0115TR-3000	SC-70	SPDT	0	3000	22	46	GaAs	.42	.35	.28
937-MASWSS0151-T	MASWSS0151TR-3000	SC-70	SPDT	0	3000	25	55	GaAs	.60	.50	.40
937-MASWSS0166-T	MASWSS0166TR-3000	SC-70	SPDT	0	3000	21	55	GaAs	.90	.75	.60
937-MASWSS0136-T	MASWSS0136TR-3000	SC-70	SPDT	0	3000	27	48	GaAs	.72	.60	.48
937-MASWSS0192-T	MASWSS0192TR-3000	SC-70	SPDT	0	3000	24	53	GaAs	2.40	2.00	1.60
937-MASWSS0115-T	MASWSS0115TR-3000	SC-70	SPDT	0	3000	22	46	GaAs	.42	.35	.28
937-MASWSS0093-T	MASWSS0093TR-3000	PQFN-12	SPDT	0	6000	29	53	GaAs Broadband	2.58	2.15	1.72
937-MASW-009444-T	MASW-009444-TR3000	PDFN-6	SPDT	0	6000	28	54	GaAs	1.35	1.13	.90
937-MASW-007921-T	MASW-007921-TR3000	PDFN-6	SPDT	0	6000	28	54	GaAs	2.22	1.85	1.48
937-MASW-007107-T	MASW-007107-TR3000	PQFN-8	SPDT	0	8000	29	54	GaAs	.99	.83	.66
937-MASWSS0178-T	MASWSS0178TR-3000	MSOP-8	SPDT	10	3000	57	43	High Isolation Term.	3.09	2.58	2.06
937-MASWSS0176-T	MASWSS0176TR-3000	SOT-26	SPDT	50	3000	21	45	GaAs	.96	.80	.64
937-MASW02103-13630G	MASW-002103-13630G	Surmount Die	SPDT	50	20000	38	40	HMIC Silicon PIN Diode	23.07	18.46	13.85
937-MA4AGSW2	MA4AGSW2	DIE	SPDT	50	70000	65	40	AlGaAs Reflective	21.80	17.44	13.88
937-MASWSS0167-T	MASWSS0167TR-3000	PQFN-6	SPDT	500	3000	25	48	GaAs	.81	.68	.54
937-MASW03103-13640G	MASW-003103-13640G	Surmount Die	SP3T	50	20000	40	40	HMIC Si PIN Diode	23.75	19.00	14.98
937-MASW04103-13650G	MASW-004103-13650G	Surmount Die	SP4T	50	20000	41	40	HMIC Si PIN Diode	28.79	23.03	18.21
937-MASW-000105-T	MASW-000105-TR3000	PQFN-20	SP6T	500	2500	47	60	GaAs Dual/Tri/Quad-band	4.59	3.83	3.06
937-MASWSS0129-T	MASWSS0129TR-3000	PQFN-12	DPDT	0	6000	30	50	GaAs Broadband	1.53	1.28	1.02
937-MASWSS0130-T	MASWSS0130TR-3000	PQFN-12	DPDT	500	3000	25	55	GaAs Broadband	.57	.48	.38
937-MASWSS0175-T	MASWSS0175TR-3000	PQFN-12	DPDT	4500	6000	29	52	GaAs	1.98	1.65	1.32
Sample Boards											
937-MASW00834-001SMB	MASW-000834-001SMB	Description									
937-MASW03103-001SMB	MASW-003103-001SMB	HMICTM PIN Diode SPDT 50 Watt Switch for 0.05-6.0 GHz ISO 53dB Sample board					250.00				
937-MASW04103-001SMB	MASW-004103-001SMB	HMICTM Silicon PIN Diode SP3T Switch - 50 MHz-20 GHz ISO 40dB Sample board					335.00				
937-MASW02103-001SMB	MASW-002103-001SMB	HMICTM Silicon PIN Diode SP4T Switch - 50 MHz-20 GHz ISO 41dB Sample board					350.00				
937-MASW02103-001SMB	MASW-002103-001SMB	HMICTM Silicon PIN Diode SPDT Switch - 50 MHz-20 GHz ISO 38dB Sample board					335.00				