



RF Amplifiers and Oscillators

Type No.	Case Style	V _{CE} [*]		V _{CE0} (V) Min	V _{EB0} (V) Min	I _{CBO} (nA) @ V _{CB} (V) Max	h _{FE}		I _C & V _{CE} (mA) & (V)	V _{CE(SAT)} (V) & V _{BE(SAT)} (V) @ I _C (mA)		C _{ob} /C _{ro} (pF) Min Max		f _T (MHz) @ I _C (mA)		NF (dB) Max	F _{req} (MHz)	Process No.	
		V _{CE0} (V) Min	V _{CB0} (V) Min				Min	Max		Max	Min	Max	Min	Max	Min				Max
2N2857	TO-72	30	15	15	2.5	10	30	150	3	1		1	1000	1900	5	4.5	450	40	
2N3478	TO-72	30	15	15	2	20	25	150	2	8		1	750	1600	5	4.5	200	40	
2N3600	TO-72	30	15	15	3	10	20	150	3	1		1	850	1500	5	4.5	200	40	
2N3932	TO-72	30	20	20	2.5	10	40	150	2	8		0.55	750	1600	2	4.5	200	40	
2N3933	TO-72	40	30	30	2.5	10	60	200	2	8		0.55	750	1600	2	4	200	40	
2N4259	TO-72	40	30	30	2.5	10	60	250	2	8		0.55	750	1600	2	5	450	40	
2N5179	TO-72	20	12	12	2.5	20	25	250	3	1	0.4	1.0	900	2000	5	4.5	200	40	
2N5180	TO-72	30	15	15	2	500	20	200	2	8		1	650	1700	2			40	
MRF501	TO-72	25	15	15	3.5	50	30	250	1	6			600		5			40	
MRF502	TO-72	35	15	15	3.5	20	40	170	1	6			800		5			40	
PN5179	TO-92 (92)	20	15	15	2.5	2	25	250	3	1	0.4	1.0	1.0	900	2000	5	4.5	200	40
MPS6539	TO-92 (91)	20	20	20	3	50	20	4	10			0.7	500		4	4.5	100	42	
MPS6548	TO-92 (91)	30	25	25	3	100	25	4	10		0.5	0.95	0.7	650	4			42	
MPSH10	TO-92 (91)	30	25	25	3	100	60	4	10		0.5		0.35	650	4			42	
2N917	TO-72	30	15	15	3	1	20	3	1		0.5	0.87	3	500	4	6	60	43	
2N918	TO-72	30	15	15	3	10	20	3	1		0.4	1.0	3	600	4	6	60	43	
2N3563		Same as PN3563																	
2N3564		Same as PN3564																	
2N3662	TO-92 (94)	18	12	12	3	500	20	8	10			0.8	1.7	700	2100	5	6.5	60	43

RF Amplifiers and Oscillators (Continued)

Type No.	Case Style	V _{CE} *		V _{CE0} (V) Min	V _{EBO} (V) Min	I _{CS0} (nA) @ V _{CB} (V)		I _{FE} @ I _C & V _{CE} (V)		V _{CE(SAT)} (V) & V _{BE(SAT)} (V)		I _C (mA)	C _{ob} /C _{ro} (pF)		f _T (MHz)		NF (dB) @ (MHz) Max	Process No.	
		Min	Max			Min	Max	Min	Max	Min	Max		Min	Max	Min	Max			
2N3663	TO-92 (94)	30		12	3	500	15	20	8	10			0.8	1.7	700	2100	5	43	
2N3825	TO-92 (94)	30		15	4	100	15	20	2	10	0.25	2	3.5		200	800	2	43	
2N4292	TO-92 (94)	30		15	3	500	15	20	3	1	0.6	10	3.5		600		4	43	
2N4293	TO-92 (94)	30		15	3	500	15	20	3	1	0.6	10	3.5		600		4	43	
2N5130		Same as PN5130																	
2N5770	TO-92 (92)	30		15	4.5	10	15	50	200	8	10	1.0	0.7	1.1	900	1800	8	43	
MPS918	TO-92 (92)	30		12	3	10	15	20	3	1	0.4	10	3		600		4	43	
MPS3563		Same as PN3563																	
MPS6507	TO-92 (92)	30*		20		5	15	25	2	10	0.4		2.5		700		10	43	
MPS6511	TO-92 (92)	30*		20		50	15	25	10	10			2.5					43	
MPS6541	TO-92 (92)	30*		20	4	50	15	25	4	10			1.7		600	1500	4	43	
MPS5770	TO-92 (92)	30		15	4.5	10	15	50	200	8	1	1.0	0.4		800	1800	8	43	
PN918	TO-92 (92)	30		15	3	10	15	20	3	1	0.4	10	1.7		600		4	43	
PN3563	TO-92 (92)	30		15	2	50	15	20	200	8	10		1.7		600	1500	8	43	
PN3564	TO-92 (92)	30		15	4	50	15	20	500	15	10	0.97	0.3		400	1200	15	43	

T-31-01

NPN Transistors



NPN Transistors

RF Amplifiers and Oscillators (Continued)																
Type No.	Case Style	V _{CE} * V _{CB0} (V) Min	V _{CE0} (V) Min	V _{EB0} (V) Min	I _{CB0} (mA) Max	I _{CB0} V _{CB} (V)	I _{FE} @ I _C & V _{CE} (mA) (V)	V _{CE(SAT)} (V) & Max	V _{BE(SAT)} (V) Min Max	I _C (mA) Min Max	C _{ob/Cro} (pF) Min Max	f _T (MHz) Min Max	I _C (mA) Min Max	NF (dB) Max	Freq (MHz) @	Process No.
PN5130	TO-92 (92)	30	12	1	50	10	15 250 8 10	0.6	1.0	10	1.7	450	8			43
2N4134	TO-72	30	30	3	50	10	25 200 4 5				0.5	350 800 4	4	2.5	60	44
2N4135	TO-72	30	30	3	50	10	25 200 4 5				0.5	425 800 4	4	5	450	44
MPS6568A	TO-92	20	20	3	50	10	20 200 4 5	0.3	0.96	10	0.65	375 800 4	4	3.3	200	44
MPS6569	TO-92	20	20	3	50	10	20 200 4 5	3	0.96	10	0.25	300 800 4	4	6	45	44
MPS6570	TO-92	20	20	3	50	10	20 200 4 5	3	0.96	10	0.25	300 800 4	4	6	45	44
MPSH80	TO-92	20	20	3	50	10	20 200 4 5	0.3	0.96	10	0.65	300 800 4	4	6	45	44
MPSH31	TO-92	20	20	3	50	10	20 200 4 5	0.3	0.96	10	0.65	300 800 4	4	6	45	44
SE5020	TO-72	20	20	3	50	10	20 200 4 5	3.0	0.96	10	0.25	375 800 4	4	3.3	200	44
SE5021	TO-72	20	20	3	50	10	20 200 4 5	3.0	0.96	10	0.25	375 800 4	4	4	200	44
SE5022	TO-72	20	20	3	50	10	20 200 4 5	3.0	0.96	10	0.25	300 800 4	4			44
SE5023	TO-72	20	20	3	50	10	20 200 4 5	3.0	0.96	10	0.25	300 800 4	4	6	45	44
SE5024	TO-72	20	20	3	50	10	20 200 4 5	3.0	0.96	10	0.25	300 800 4	4	6	45	44*
SE5050	TO-72	20	20	3	50	10	20 200 4 5	3.0	0.96	10	0.25	300	4	4	100	44
SE5051	TO-72	20	20	3	50	10	20 200 4 5	3.0	0.96	10	0.25	300	4			44
SE5052	TO-72	20	20	3	50	10		3.0		10		375	4	4	200	44
MPS6542	TO-92 (96)	30*	20		50	15	25				1.5	700	10			47
MPS6543	TO-92 (96)	35	20	3	100	25	25 4 10	0.35	0.05	10	1	750	4			47
MPS6546	TO-92 (96)	35	25	3	100	25	20 2 10	0.35		10	0.45	600	2			47
MPS6547	TO-92 (96)	35	25	3	100	25	20 2 5	0.35		10	0.35	600	2			47
MPSH11	TO-92 (96)	30	25	3	100	25	60 4 10	0.5		4	0.6	650	4			47

T-31-01

T-31-01

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Type No.	Case Style	V _{CE} [*]		V _{CE0} (V) Min	V _{EB0} (V) Min	I _{CB0} (mA) Max	I _{CB0} (V) Max	h _{FE}		I _C (mA) Max	V _{CE} (V) Max	V _{CE(SAT)} (V) & V _{BE(SAT)} (V) @ I _C (mA)		C _{ob} /C _{ro} (pF) Min Max	f _T (MHz) Min Max	I _C (mA) Max	NF (dB) @ (MHz) Max	Freq (MHz)	Process No.
		V _{CB0} (V) Min	V _{CE0} (V) Min					Min	Max			Min	Max						
MPSH19	TO-92 (96)	30	25	3	3	100	15	45	4	10				0.65	300	4			47
MPSH24	TO-92 (96)	40	30	4	4	50	15	30	8	10				0.36	400	8			47
MPSH34	TO-92 (96)	45	45	4	4	50	30	15 40	20 7	2 15	0.5	0.5		0.32	500	15			47
TIS86	TO-92 (96)	30	30			100	15	40	4	10	0.5	0.5		0.45	500	4	5	200	47
TIS87	TO-92 (96)	45	45			100	15	30	150	12	0.5	0.5		0.45	500	12			47
MPS6540	TO-92 (96)	30	30	4	4	100	25	25	2	10	0.5	0.5		0.65	350	2			49
MPS6544	TO-92 (96)	60	45	4	4	500	35	20	30	10	0.5	0.5		0.65					49
MPS6567	TO-92 (96)		40	5	5	500	35	25	10	5	0.5	0.5		0.7					49
MPSH20	TO-92 (96)	40	30	4	4	50	15	25	4	10	0.95	10	0.65	0.65	400	4			49
MPSH37	TO-92 (96)		40	5	5	500	35	25	5	10	0.5	10	0.7	300	5				49

NPN Transistors

3