



RF Amplifiers and Oscillators

Type No.	Case Style	V _{CE} [*] V _{CE} (V) Min	V _{CEO} (V) Min	V _{EB0} (V) Min	I _{CB0} V _{CB} (mA) @ (V) Max	h _{FE} @ I _C & V _{CE} (V)		V _{CE(SAT)} (V) & Max	V _{BE(SAT)} (V) @ I _C		C _{ob} /C _{ro} (pF) Min Max	f _T (MHz) @ I _C Min Max		NF (dB) @ Max	Freq (MHz)	Process No.		
						Min	Max		Min	Max		Min	Max				Min	Max
2N2857	TO-72	30	15	2.5	10	15	30	150	3	1	1	1000	1900	5	4.5	450	40	
2N3478	TO-72	30	15	2	20	1	25	150	2	8	1	750	1600	5	4.5	200	40	
2N3600	TO-72	30	15	3	10	15	20	150	3	1	1	850	1500	5	4.5	200	40	
2N3932	TO-72	30	20	2.5	10	15	40	150	2	8	0.55	750	1600	2	4.5	200	40	
2N3933	TO-72	40	30	2.5	10	15	60	200	2	8	0.55	750	1600	2	4	200	40	
2N4259	TO-72	40	30	2.5	10	15	60	250	2	8	0.55	750	1600	2	5	450	40	
2N5179	TO-72	20	12	2.5	20	15	25	250	3	1	0.4	900	2000	5	4.5	200	40	
2N5180	TO-72	30	15	2	500	8	20	200	2	8	1	650	1700	2			40	
MRF501	TO-72	25	15	3.5	50	1	30	250	1	6		600	5				40	
MRF502	TO-72	35	15	3.5	20	1	40	170	1	6		800	5				40	
PN5179	TO-92 (92)	20	15	2.5	2	15	25	250	3	1	0.4	900	2000	5	4.5	200	40	
MPS6539	TO-92 (91)	20	20	3	50	15	20	4	10		0.7	500	4	4.5	100		42	
MPS6548	TO-92 (91)	30	25	3	100	25	25	4	10		0.7	650	4				42	
MPSH10	TO-92 (91)	30	25	3	100	25	60	4	10		0.35 0.65	650	4				42	
2N917	TO-72	30	15	3	1	15	20	3	1		3	500	4	6	60		43	
2N918	TO-72	30	15	3	10	15	20	3	1		3	600	4	6	60		43	
2N3563		Same as PN3563																
2N3564		Same as PN3564																
2N3662	TO-92 (94)	18	12	3	500	15	20	8	10		0.8 1.7	700	2100	5	6.5	60		43

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Type No.	Case Style	V _{CE} *		V _{CE0} (V) Min	V _{EB0} (V) Min	I _{CB0} (mA) Max	V _{CB} (V)	h _{FE} @ I _C & V _{CE} (V)		V _{CE(SAT)} (V) & V _{BE(SAT)} (V) @ I _C (mA)		C _{ob/Cro} (pF)		f _T (MHz) @ I _C (mA)		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	6.5	60	43		
2N3825	TO-92 (94)	30	15	4	100	15	20	2	10	0.25	2	3.5	3.5	200	800	2	5.5	1	43		
2N4292	TO-92 (94)	30	15	3	500	15	20	3	1	0.6	10	3.5	3.5	600	600	4	6	60	43		
2N4293	TO-92 (94)	30	15	3	500	15	20	3	1	0.6	10	3.5	3.5	600	600	4	6	60	43		
2N5130	Same as PN5130																				
2N5770	TO-92 (92)	30	15	4.5	10	15	50	200	8	10	0.4	1.0	10	0.7	1.1	900	1800	8	6	60	43
MPS918	TO-92 (92)	30	12	3	10	15	20	3	1	0.4	10	3	3	600	600	4	6	60	43		
MPS3563	Same as PN3563																				
MPS6507	TO-92 (92)	30*	20		5	15	25	2	10			2.5	2.5	700	700	10			43		
MPS6511	TO-92 (92)	30*	20		50	15	25	10	10			2.5	2.5						43		
MPS6541	TO-92 (92)	30*	20	4	50	15	25	4	10			1.7	1.7	600	1500	4			43		
MPS5770	TO-92 (92)	30	15	4.5	10	15	50	200	8	1	0.4	1.0	10			800	1800	8	43		
PN918	TO-92 (92)	30	15	3	10	15	20	3	1	0.4	10	3	3	600	600	4	6	60	43		
PN3563	TO-92 (92)	30	15	2	50	15	20	200	8	10		1.7	1.7	600	1500	8			43		
PN3564	TO-92 (92)	30	15	4	50	15	20	500	15	10	0.3	0.97	20	3.5	3.5	400	1200	15	43		

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Type No.	Case Style	V _{CE} *		V _{CE0} (V) Min	V _{EB0} (V) Min	I _{CB0} (nA) Max	V _{CB} (V) Max	h _{FE} Min	h _{FE} Max	I _C (mA) & V _{CE} (V)	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) Max	Freq (MHz)	Process No.		
		Min	Max								Min	Max								
PN5130	TO-92 (92)	30	12	1	50	10	10	15	250	8	10	0.6	1.0	1.7	450	8		43		
2N4134	TO-72	30	30	3	50	10	5	25	200	4	5			0.5	350	800	4	2.5	60	44
2N4135	TO-72	30	30	3	50	10	5	25	200	4	5			0.5	425	800	4	5	450	44
MPS6568A	TO-92	20	20	3	50	10	5	20	200	4	5	0.3	0.96	0.65	375	800	4	3.3	200	44
MPS6569	TO-92	20	20	3	50	10	5	20	200	4	5	3	0.96	0.25	300	800	4	6	45	44
MPS6570	TO-92	20	20	3	50	10	5	20	200	4	5	3	0.96	0.25	300	800	4	6	45	44
MPSH30	TO-92	20	20	3	50	10	5	20	200	4	5	0.3	0.96	0.65	300	800	4	6	45	44
MPSH31	TO-92	20	20	3	50	10	5	20	200	4	5	0.3	0.96	0.65	300	800	4	6	45	44
SE5020	TO-72	20	20	3	50	10	5	20	200	4	5	3.0	0.96	0.25	375	800	4	3.3	200	44
SE5021	TO-72	20	20	3	50	10	5	20	200	4	5	3.0	0.96	0.25	375	800	4	4	200	44
SE5022	TO-72	20	20	3	50	10	5	20	200	4	5	3.0	0.96	0.25	300	800	4			44
SE5023	TO-72	20	20	3	50	10	5	20	200	4	5	3.0	0.96	0.25	300	800	4	6	45	44
SE5024	TO-72	20	20	3	50	10	5	20	200	4	5	3.0	0.96	0.25	300	800	4	6	45	44*
SE5050	TO-72	20	20	3	50	10	5	20	200	4	5	3.0	0.96	0.25	300	4	4	100	44	
SE5051	TO-72	20	20	3	50	10	5	20	200	4	5	3.0	0.96	0.25	300	4			44	
SE5052	TO-72	20	20	3	50	10						3.0			375	4	4	200	44	
MPS6542	TO-92 (96)	30*	20		50	15	10	25	2	10				1.5	700	10			47	
MPS6543	TO-92 (96)	35	20	3	100	25	10	25	25	4	10	0.35	0.05	1	750	4			47	
MPS6546	TO-92 (96)	35	25	3	100	25	10	20	20	2	10	0.35		0.45	600	2			47	
MPS6547	TO-92 (96)	35	25	3	100	25	5	20	20	2	5	0.35		0.35	600	2			47	
MPSH11	TO-92 (96)	30	25	3	100	25	10	60	60	4	10	0.5		0.6	650	4			47	

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		Min	Max		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max			
MPSH19	TO-92 (96)	30	25	3	100	15	45	4	10						0.65	300	4			47	
MPSH24	TO-92 (96)	40	30	4	50	15	30	8	10						0.36	400	8			47	
MPSH34	TO-92 (96)	45	45	4	50	30	15	20	2	0.5					0.32	500	15			47	
TIS86	TO-92 (96)	30	30		100	15	40	200	4	0.5					0.45	500	4	5	200	47	
TIS87	TO-92 (96)	45	45		100	15	30	150	12	0.5					0.45	500	12			47	
MPS6540	TO-92 (96)	30	30	4	100	25	25	2	10	0.5					0.65	350	2			49	
MPS6544	TO-92 (96)	60	45	4	500	35	20	30	10	0.5					0.65					49	
MPS6567	TO-92 (96)		40	5	500	35	25	10	5	0.5					0.7					49	
MPSH20	TO-92 (96)	40	30	4	50	15	25	4	10		0.95				0.65	400	4			49	
MPSH37	TO-92 (96)		40	5	500	35	25	5	10	0.5					0.7	300	5			49	

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