



National
Semiconductor

N-Channel JFETs

RF, VHF, UHF Amplifiers

Type No.	Case Style	BV _{GSS} (V) @ I _G Min	I _{GSS} (nA) @ V _{DSS} Max	V _P (V) @ V _{DSS} Min Max	I _{DSS} (mA) @ V _{DSS} Min Max	R _{DS(on)} (mΩ) @ Freq. Min	R _{DS(on)} (mΩ) @ f _{max} Max	C _{iss} (pF) @ V _{DSS} Max	V _{GS} (V)	C _{rss} (pF) @ V _{DSS} Max	V _{GS} (V)	NF (dB) @ R _G = 1k Freq. (MHz) Max	Process Pkg. No.
2N3819	TO-92	25 1	2 15	8 15 2	2 20 15	1.6 100	200 200	8 15 0	0	4 15 0	0	2.5 100	50
2N3823	TO-72	30 1	0.5 20	8 15 0.5	4 20 15	3.2 200	200 200	6 15 0	0	2 15 0	0	5 200	50
2N4223	TO-72	30 10	0.25 20	0.1 8 15 0.25	3 18 15	2.7 200	200 200	6 15 0	0	2 15 0	0	5 200	50
2N4224	TO-72	30 10	0.1 20	0.1 8 15 0.5	2 20 15	1.7 200	200 200	6 15 0	0	2 15 0	0	5 200	50
2N4416	TO-72	30 1	0.1 20	6 15 1	5 15 15	4 400	100 400	4 15 0	0	0.8 15 0	0	4 400	50
2N4416A	TO-72	35 1	0.1 20	2.5 6 15 1	5 15 15	4 400	100 400	4 15 0	0	0.8 15 0	0	4 400	50
2N5078	TO-72	30 1	0.25 20	0.5 8 15 1	4 25 15	4 200	150 200	6 15 0	0	2 15 0	0	3 200	50
2N5245	TO-92	30 1	1 20	1 6 15 10	5 15 15	4 400	100 400	4.5 15 0	0	1 15 0	0	4 400	90
2N5246	TO-92	30 1	1 20	0.5 4 15 10	1.5 7 15	2.5 400	100 400	4.5 15 0	0	1 15 0	0	4 400	90
2N5247	TO-92	30 1	1 20	1.5 8 15 10	8 24 15	4 400	150 400	4.5 15 0	0	1 15 0	0	4 400	90
2N5248	TO-92	30 1	5 20	1 8 15 10	4 20 15	3 200	200 200	6 15 0	0	2 15 0	0	4 400	50
2N5397	TO-72	25 1	0.1 15	1 6 10 1	10 30 10	5.5 450	200 450	5 10 0	10 mA	1.2 10 0	10 mA	3.5 450	90
2N5398	TO-72	25 1	0.1 15	1 6 10 1	5 40 10	5.0 450	400 450	5.5 10 0	0	1.3 10 0	0	3.2 450	90
2N5484	TO-92	25 1	1 20	0.3 3 15 10	1 5 15	2.5 100	75 100	5 15 0	0	1 15 0	0	3 100	50
2N5485	TO-92	25 1	1 20	1 4 15 10	4 10 15	3 400	100 400	5 15 0	0	1 15 0	0	4 400	50
2N5486	TO-92	25 1	1 20	2 6 15 10	8 20 15	3.5 400	100 400	5 15 0	0	1 15 0	0	4 400	50
2N5488	TO-92	25 10	2 15	0.2 4 14 10	1 5 15	1 100	50 100	7 15 0	0	3 15 0	0	2.5 100	50
2N5469	TO-92	25 10	2 15	1 6 15 10	4 10 15	1.6 100	100 100	7 15 0	0	3 15 0	0	2.5 100	50
2N5470	TO-92	25 10	2 15	2 8 15 10	8 20 15	2.5 100	150 100	7 15 0	0	3 15 0	0	2.5 100	50
2N5949	TO-92	30 1	1 15	3 7 15 100	12 18 15	3.0 100	75 100	6 15 0	0	2 15 0	0	5 100	90
2N5950	TO-92	30 1	1 15	2.5 6 15 100	10 15 15	3.0 100	75 100	6 15 0	0	2 15 0	0	5 100	50
2N5951	TO-92	30 1	1 15	2 5 15 100	7 13 15	3.0 100	75 100	6 15 0	0	2 15 0	0	5 100	50
2N5952	TO-92	30 1	1 15	1.8 3.5 15 100	4 8 15	1.0 100	75 100	6 15 0	0	2 15 0	0	5 100	50
2N5953	TO-92	30 1	1 15	0.8 3 15 100	2.5 5 15	1.0 100	50 100	6 15 0	0	2 15 0	0	5 100	50
J300	TO-92	25 1	0.5 15	1 6 10 1	6 30 10	4.5 0.001	200 0.001	5.5 10 5 mA	0	1.7 10 5 mA	0	5 100	90
J304	TO-92	30 1	0.1 20	2 6 15 1	5 15 15	14.2 400	180 100	7.5 0	0	2.5 0	0	5 100	50
J305	TO-92	30 1	0.1 20	0.5 3 15 1	1 8 15	13.0 400	180 100	7.5 0	0	2.5 0	0	5 100	50
J308	TO-92	25 1	1 15	1 6.5 10 1	12 60 10	8 0.001	200 0.001	7.5 0	0	2.5 0	0	5 100	92
J309	TO-92	25 1	1 15	1 4.0 10 1	12 30 10	10 0.001	200 0.001	7.5 0	0	2.5 0	0	5 100	92
J310	TO-92	25 1	1 15	2 6.5 10 1	24 60 10	8 0.001	200 0.001	7.5 0	0	2.5 0	0	5 100	92

t = typical value

T-39-01

JFET Transistors

T-39-01

RF, VHF, UHF Amplifiers (Continued)														N-Channel JFETs	
Type No.	Case Style	BV _{GSS} (V) @ I _G Min	I _{GSS} (nA) @ V _{DS} Max	V _P (V) @ V _{DS} Min	I _D (nA) Max	I _{DSS} (mA) @ V _{DS} Min	R _{DS(on)} (mΩ) @ Freq. Min	R _{DS(on)} (mΩ) @ Freq. Max	C _{iss} (pF) @ I _{DS} Max	V _{GS} (V)	C _{rss} (pF) @ V _{DS} Max	V _{GS} (V)	NF (dB) @ R _G = 1k Freq. (MHz) Max	Process Pkg. No.	
MPF102	TO-92	25	1	8	15	2	1.6	100	7	15	3	15	4	50	
MPF106	TO-92	25	1	0.5	4	10	2.5	0.001	5	15	2	15	4	50	
MPF107	TO-92	25	1	2	6	15	4	0.001	5	15	1.2	15	4	50	
MPF108	TO-92	25	1	0.5	8	15	1.6	100	6.5	15	2.5	15	3	50	
MPF256	TO-92	25	10	0.5	7.5	15	6	0.001	200	100	2.5	15	2.0	90	
MPF820	TO-92	25	10	5.0	15	200	0.001							92	
PN4223	TO-92	30	1	0.1	8	15	2.7	200	6	15	2	15	4.0	51	
PN4224	TO-92	30	1	0.1	8	15	1.7	200	6	15	2	15	5	50	
PN4416	TO-92	30	1	0.1	6	15	4	400	4	15	0.8	15	4	50	
U308	TO-52	25	1	1	6	10	10	0.001	5	0	2.5	0		92	
U309	TO-52	25	1	1	4	10	10	0.001	5	0	2.5	0		92	
U310	TO-52	25	1	2.5	6	10	10	0.001	5	10	2.5	10		92	
U312	TO-52	25	1	1	6	10	6	0.001	3.8	10	1.2	10		90	

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56