



National Semiconductor™

Discrete POWER & Signal Technologies

N-Channel JFETS

Low Frequency - Low Noise Amplifiers

Device No.	Case Style	BV <sub>gss</sub> (V) @ I <sub>g</sub> (μA)		I <sub>gss</sub> (nA) @ V <sub>DG</sub> (V)		V <sub>GS(off)</sub> (V) @ V <sub>DS</sub> (V)		I <sub>DSS</sub> (mA) @ V <sub>DS</sub> (V)		g <sub>fs</sub> (R <sub>gs</sub>   V <sub>fs</sub> ) (mmho) V <sub>DS</sub> (V)		C <sub>iss</sub> (pF) V <sub>DS</sub> (V)		C <sub>rss</sub> (pF) V <sub>DS</sub> (V)		NF nV/√Hz @ f (Hz)		Process No.	Pkg. No.	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max			
PF5101	TO-92	40	1	0.2	15	0.5	1.1	15	1	12	15	3.5	15	0.001	14	15	3.5	1000	51	92
PF5102	TO-92	40	1	0.2	15	0.7	1.6	15	1	4	20	7.5	15	0.001	14	15	3.5	1000	51	92
PF5103	TO-92	40	1	0.2	15	1.2	2.7	15	1	10	40	7.5	15	0.001	14	15	3.5	1000	51	92
PN4393	TO-92	40	1	0.1	20	0.5	3	20	1	5	30	12	20	0.001	14	20	18	10	51	92

t = typical value

Ultra Low Input Current Amplifiers

Device No.	Case Style	BV <sub>gss</sub> (V) @ I <sub>g</sub> (μA)		I <sub>gss</sub> (pA) @ V <sub>DG</sub> (V)		V <sub>P</sub> (V) @ V <sub>DS</sub> (V)		I <sub>DSS</sub> (μA) @ V <sub>DS</sub> (V)		G <sub>fs</sub> (μmho) @ V <sub>DS</sub> (V)		C <sub>iss</sub> (pF) @ V <sub>DS</sub> (V)		C <sub>rss</sub> (pF) @ V <sub>DS</sub> (V)		Process No.	Pkg. No.			
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max					
PF5301	TO-92	30	1	1	15	0.6	3	10	1	30	500	10	3	10	0	1.5	10	0	53	92
PF5301-1	TO-92	30	1	1	15	0.6	1.8	10	1	30	500	10	3	10	0	1.5	10	0	53	92
PF5301-2	TO-92	30	1	1	15	1.7	3	10	1	30	500	10	3	10	0	1.5	10	0	53	92
PF5301-3	TO-92	30	1	1	15	1	2.4	10	1	30	500	10	3	10	0	1.5	10	0	53	92
PN4117	TO-92	40	10	10	20	0.6	1.8	10	1	30	90	10	3	10	0	1.5	10	0	53 (7-37)	92
PN4117A	TO-92	40	1	1	20	0.6	1.8	10	1	30	90	10	3	10	0	1.5	10	0	53	92
PN4118	TO-92	40	10	10	20	1	3	10	1	80	240	10	3	10	0	1.5	10	0	53 (7-37)	92
PN4118A	TO-92	40	1	1	20	1	3	10	1	80	240	10	3	10	0	1.5	10	0	53	92
PN4119	TO-92	40	10	10	20	2	6	10	1	200	600	10	3	10	0	1.5	10	0	53 (7-37)	92
PN4119A	TO-92	40	1	1	20	2	6	10	1	200	600	10	3	10	0	1.5	10	0	53	92
PN4120	TO-92	40	1	20	20	0.6	3	10	1	30	300	10	3	10	0	1.5	10	0	53	92
PN4120A	TO-92	40	1	5	20	0.6	3	10	1	30	300	10	3	10	0	1.5	10	0	53	92

NOTE: National preferred device for each process in bold. Number shown in parentheses indicates location (section-page) of device datasheet.