



# N-Channel JFETs

## SWITCHES/CHOPPERS (Continued)

Type No.	Case Style	BV <sub>GSS</sub> BV <sub>GDO</sub> (V) @ I <sub>G</sub>		I <sub>GSS</sub> * I <sub>DGO</sub> (nA) @ V <sub>DG</sub>		I <sub>D(off)</sub> (nA) @ V <sub>DS</sub> V <sub>GS</sub>			V <sub>p</sub> (V) @ V <sub>DS</sub>			I <sub>DSS</sub> (mA) @ V <sub>DS</sub>		r <sub>ds(on)</sub> (Ω) @ I <sub>D</sub>		C <sub>iss</sub> (pF) @ V <sub>DS</sub> V <sub>GS</sub>		C <sub>rss</sub> (pF) @ V <sub>DS</sub> V <sub>GS</sub>		t <sub>on</sub> (ns)	t <sub>off</sub> (ns)	Process No.	Pkg. No.			
		Min	Max	Min	Max	Max	Min	Max	Min	Max	Min	Max	Max	Max	Max	Max	Max	Max	Max							
2N5653	TO-92	30	10	1	15	1	15	-12	(12)			40	20	50	1	10	0	-12	3.5	0	-12	9	15	51	92	
2N5654	TO-92	25	10	1	15	10	15	-8	(8)			15	20	100	1	10	0	-12	3.5	0	-8	14	30	51	92	
J108	TO-92	25	1	3	15	3	5	-10	3	10	5	1000	80	15	8	10	t30	0	-10	t15	0	-10	15	t36	58	92
J109	TO-92	25	1	3	15	3	5	-10	2	6	5	1000	40	15	12	10	t30	0	-10	t15	0	-10	15	t36	58	92
J110	TO-92	25	1	3	15	3	5	-10	0.5	4	5	1000	10	15	18	10	t30	0	-10	t15	0	-10	15	t36	58	92
J111	TO-92	35	1	1	15	1	5	-10	3	10	5	1000	20	15	30	1	t10	0	-10	15	0	-10	t13	t35	51	92
J112	TO-92	35	1	1	15	1	5	-10	1	5	5	1000	5	15	50	1	t10	0	-10	15	0	-10	t13	t35	51	92
J113	TO-92	35	1	1	15	1	5	-10	0.5	3	5	1000	2	15	100	1	t10	0	-10	15	0	-10	t13	t35	51	92
J114	TO-92	25	1	1	15	1	5	-10	3	10	5	1000	15	15	150	1	t4	0	-10	t2	0	-10	t6	t20	90	92
PN4091	TO-92	40	1	0.2*	20	0.2	20	-12	5	10	20	1	30	20	30		16	20	0	5	20	0	25	40	51	92
PN4092	TO-92	40	1	0.2*	20	0.2	20	-8	2	7	20	1	15	20	50		16	20	0	5	20	0	35	60	51	92
PN4093	TO-92	40	1	0.2*	20	0.2	20	-6	1	5	20	1	8	20	80		16	20	0	5	20	0	60	80	51	92
PN4391	TO-92	40	1	0.1	20	0.1	20	-12	4	10	20	1	50	150	20	30	14	20	0	3.5	0	-12	20	35	51	92
PN4392	TO-92	40	1	0.1	20	0.1	20	-7	2	5	20	1	25	75	20	60	14	20	0	3.5	0	-7	40	80	51	92
PN4393	TO-92	40	1	0.1	20	0.1	20	-5	0.5	3	20	1	5	30	20	100	14	20	0	3.5	0	-5	55	130	51	92
PN4856	TO-92	40	1	0.25	20	0.25	15	-10	4	10	15	0.5	50	15	25		18	0	-10	8	0	-10	9	25	51	92
PN4857	TO-92	40	1	0.25	20	0.25	15	-10	2	6	15	0.5	20	100	15	40	18	0	-10	8	0	-10	10	50	51	92
PN4858	TO-92	40	1	0.25	20	0.25	15	-10	0.8	4	15	0.5	8	80	15	60	18	0	-10	8	0	-10	20	100	51	92
PN4859	TO-92	30	1	0.25	15	0.25	15	-10	4	10	15	0.5	50	15	25		18	0	-10	8	0	-10	9	25	51	92
PN4860	TO-92	30	1	0.25	15	0.25	15	-10	2	6	15	0.5	20	100	15	40	18	0	-10	8	0	-10	10	50	51	92
PN4861	TO-92	30	1	0.25	15	0.25	15	-10	0.8	4	15	0.5	8	80	15	60	18	0	-10	8	0	-10	20	100	51	92
PN5432	TO-92	25	1	0.2	15	0.2	5	-10	4	10	5	3	150	15	5	10	30	0	-10	15	0	-10	5	36	58	92
PN5433	TO-92	25	1	0.2	15	0.2	5	-10	3	9	5	3	100	15	7	10	30	0	-10	15	0	-10	5	36	58	92
PN5434	TO-92	25	1	0.2	15	0.2	5	-10	1	4	5	3	30	15	10	10	30	0	-10	15	0	-10	5	36	58	92
TIS73	TO-92	30	1	2	15	2	15	-10	4	10	15	4	50	15	25		18	0	-10	8	0	-10	9	25	51	97
TIS74	TO-92	30	1	2	15	2	15	-10	2	6	15	4	20	100	15	40	18	0	-10	8	0	-10	10	50	51	97
TIS75	TO-92	30	1	2	15	2	15	-10	0.8	4	15	4	8	80	15	60	18	0	-10	8	0	-10	20	100	51	97
U1897	TO-92	40	1	0.2*	20				5	10	20	1	30	20	30	1	16	20	0	5	0	-20	25	40	51	92
U1898	TO-92	40	1	0.2*	20				2	7	20	1	15	20	50	1	16	20	0	5	0	-20	35	60	51	92
U1899	TO-92	40	1	0.2*	20				1	5	20	1	8	20	80	1	16	20	0	5	0	-20	60	80	51	92

t = typical value.

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Industry P/N	Polarity	Package	Direct Replacement	Closest Equivalent Replacement	Process Package	Package Type	Industry P/N	Polarity	Package	Direct Replacement	Closest Equivalent Replacement	Process Package	Package Type
2N5020	P	TO-18	2N5020		8811	TO-18	2N5668	N	TO-92	2N5668		5072	TO-92
2N5021	P	TO-18	2N5021		8971	TO-92	2N5669	N	TO-92	2N5669		5072	TO-92
2N5033	P	TO-106	PN5033-18		8971	TO-92	2N5670	N	TO-92	2N5670		5072	TO-92
2N5045	N	TO-71	2N5045		8312	TO-71	2N5717	N	TO-92		PN3686	5272	TO-92
2N5046	N	TO-71	2N5046		8312	TO-71	2N5718	N	TO-92		PN4302	5272	TO-92
2N5047	N	TO-71	2N5047		8312	TO-71	2N5801	N	TO-92		J210	9072	TO-92
2N5078	N	TO-72	2N5078		5025	TO-72	2N5802	N	TO-92		J212	9072	TO-92
2N5103	N	TO-72	2N5103		5025	TO-72	2N5902	N	TO-78	2N5902		8424	TO-78
2N5104	N	TO-72	2N5104		5025	TO-72	2N5903	N	TO-78	2N5903		8424	TO-78
2N5105	N	TO-72	2N5105		5025	TO-72	2N5904	N	TO-78	2N5904		8424	TO-78
2N5114	P	TO-18	2N5114		8811	TO-18	2N5905	N	TO-78	2N5905		8424	TO-78
2N5115	P	TO-18	2N5115		8811	TO-18	2N5906	N	TO-78	2N5906		8424	TO-78
2N5116	P	TO-18	2N5116		8811	TO-18	2N5907	N	TO-78	2N5907		8424	TO-78
2N5158	N	TO-18		2N5433	8807	TO-52	2N5908	N	TO-78	2N5908		8424	TO-78
2N5159	N	TO-18		2N5432	5807	TO-52	2N5909	N	TO-78	2N5909		8424	TO-78
2N5163	N	TO-106	PN5163-18		5072	TO-18	2N5911	N	TO-78	2N5911		9324	TO-78
2N5196	N	TO-71	2N5196		8312	TO-18	2N5912	N	TO-78	2N5912		9324	TO-78
2N5197	N	TO-71	2N5197		8312	TO-18	2N5949	N	TO-106	2N5949-18		5077	TO-92
2N5198	N	TO-71	2N5198		8312	TO-18	2N5950	N	TO-106	2N5950-18		5077	TO-92
2N5199	N	TO-71	2N5199		8312	TO-18	2N5951	N	TO-106	2N5951-18		5077	TO-92
2N5245	N	TO-106	2N5245-18		9077	TO-92	2N5952	N	TO-106	2N5952-18		5077	TO-92
2N5246	N	TO-106	2N5246-18		9077	TO-92	2N5953	N	TO-106	2N5953-18		5077	TO-92
2N5247	N	TO-106	2N5247-18		9077	TO-92	2N6483	N	TO-71	2N6483		9512	TO-71
2N5248	N	TO-92	2N5248		5074	TO-92	2N6484	N	TO-71	2N6484		9512	TO-71
2N5358	N	TO-72	2N5358		5525	TO-72	2N6485	N	TO-71	2N6485		9512	TO-71
2N5359	N	TO-72	2N5359		5525	TO-72	2SK11	N	TO-72		2N3459	5202	TO-18
2N5360	N	TO-72	2N5360		5525	TO-72	2SK12	N	TO-72		2N4340	5202	TO-18
2N5361	N	TO-72	2N5361		5525	TO-72	2SK13	N	TO-72		2N4340	5202	TO-18
2N5362	N	TO-72	2N5362		5525	TO-72	2SK15	N	TO-72		2N4340	5202	TO-18
2N5363	N	TO-72	2N5363		5525	TO-72	2SK19	N	TO-106		2N5485-18	5072	TO-92
2N5364	N	TO-72	2N5364		5525	TO-72	2SK30	N	TO-92		PN4304	5272	TO-92
2N5397	N	TO-72	2N5397		9025	TO-72	2SK37	N	B-69		2N5484	5072	TO-92
2N5398	N	TO-72	2N5398		9025	TO-72	2SK48	N	TO-72		2N3686	5225	TO-72
2N5432	N	TO-18	2N5432		5807	TO-72	2SK68	N	TO-92		PF5101	5172	TO-92
2N5433	N	TO-18	2N5433		5807	TO-72	3SK22	N	TO-72		2N5078	5025	TO-72
2N5434	N	TO-18	2N5434		5807	TO-72	3SK23	N	TO-72		2N5397	9025	TO-72
2N5452	N	TO-71	2N5452		8312	TO-71	3SK28	N	TO-72		2N5078	5025	TO-72
2N5453	N	TO-71	2N5453		8312	TO-71	A573821	N	TO-92	2N3821		5525	TO-72
2N5454	N	TO-71	2N5454		8312	TO-71	A573822	N	TO-92	2N3822		5525	TO-72
2N5457	N	TO-92	2N5457		5572	TO-92	A573823	N	TO-92	2N3823		5029	TO-72
2N5458	N	TO-92	2N5458		5572	TO-92	A573824	N	TO-92	2N3824		5525	TO-72
2N5459	N	TO-92	2N5459		5572	TO-92	A575460	P	TO-92	2N5460		8971	TO-92
2N5460	P	TO-92	2N5460		8971	TO-92	A575461	P	TO-92	2N5461		8971	TO-92
2N5461	P	TO-92	2N5461		8971	TO-92	A575462	P	TO-92	2N5462		8971	TO-92
2N5462	P	TO-92	2N5462		8971	TO-92	BC264A	N	TO-92	BC264A		5077	TO-92
2N5471	P	TO-72		2N5020	8911	TO-18	BC264B	N	TO-92	BC264B		5077	TO-92
2N5472	P	TO-72		2N5020	8911	TO-18	BC264C	N	TO-92	BC264C		5077	TO-92
2N5473	P	TO-72		2N5020	8911	TO-18	BC264D	N	TO-92	BC264D		5077	TO-92
2N5474	P	TO-72		2N5020	8911	TO-18	BF244A	N	TO-92	BF244A		5074	TO-92
2N5475	P	TO-72		2N5020	8911	TO-18	BF244B	N	TO-92	BF244B		5074	TO-92
2N5476	P	TO-72		2N5020	8911	TO-18	BF244C	N	TO-92	BF244C		5074	TO-92
2N5484	N	TO-92	2N5484		5072	TO-92	BF245A	N	TO-92	BF245A		5077	TO-92
2N5485	N	TO-92	2N5485		5072	TO-92	BF245B	N	TO-92	BF245B		5077	TO-92
2N5486	N	TO-92	2N5486		5072	TO-92	BF245C	N	TO-92	BF245C		5077	TO-92
2N5515	N	TO-71	2N5515		9512	TO-71	BF246A	N	TO-92	BF246A		5174	TO-92
2N5516	N	TO-71	2N5516		9512	TO-71	BF246B	N	TO-92	BF246B		5174	TO-92
2N5517	N	TO-71	2N5517		9512	TO-71	BF246C	N	TO-92	BF246C		5174	TO-92
2N5518	N	TO-71	2N5518		9512	TO-71	BF247A	N	TO-92	BF247A		5177	TO-92
2N5519	N	TO-71	2N5519		9512	TO-71	BF247B	N	TO-92	BF247B		5177	TO-92
2N5520	N	TO-71	2N5520		9512	TO-71	BF247C	N	TO-92	BF247C		5177	TO-92
2N5521	N	TO-71	2N5521		9512	TO-71	BF256A	N	TO-92	BF256A		5077	TO-92
2N5522	N	TO-71	2N5522		9512	TO-71	BF256B	N	TO-92	BF256B		5077	TO-92
2N5523	N	TO-71	2N5523		9512	TO-71	BF256C	N	TO-92	BF256C		5077	TO-92
2N5524	N	TO-71	2N5524		9512	TO-71	BFW10	N	TO-72		2N4224	5025	TO-72
2N5545	N	TO-71	2N5545		8312	TO-71	BFW11	N	TO-72		2N5558	5025	TO-72
2N5546	N	TO-71	2N5546		8312	TO-71	BFW61	N	TO-72		2N4224	5025	TO-72
2N5547	N	TO-71	2N5547		8312	TO-71	BSV78	N	TO-18		2N4856	5102	TO-18
2N5549	N	TO-72		2N5397	9025	TO-72	BSV79	N	TO-18		2N4857	5102	TO-18
2N5555	N	TO-92	2N5555		5072	TO-92	BSV80	N	TO-18		2N4858	5102	TO-18
2N5556	N	TO-72	2N5556		5025	TO-72	E101	N	TO-106	J201-18		5272	TO-92
2N5557	N	TO-72	2N5557		5025	TO-72	E102	N	TO-106	J202-18		5272	TO-92
2N5558	N	TO-72	2N5558		5025	TO-72	E103	N	TO-106	J203-18		5272	TO-92
2N5561	N	TO-71	2N5561		9812	TO-71	E106	N	TO-106		J108-18	5872	TO-92
2N5562	N	TO-71	2N5562		9812	TO-71	E107	N	TO-106		J108-18	5872	TO-92
2N5563	N	TO-71	2N5563		9812	TO-71	E108	N	TO-106	J108-18		5872	TO-92
2N5564	N	TO-71	2N5564		9612	TO-71	E109	N	TO-106	J109-18		5872	TO-92
2N5565	N	TO-71	2N5565		9612	TO-71	E110	N	TO-106	J110-18		5872	TO-92
2N5566	N	TO-71	2N5566		9612	TO-71	E111	N	TO-106	J111-18		5172	TO-92
2N5592	N	TO-72		PN5163-18	5072	TO-92	E112	N	TO-106	J112-18		5172	TO-92
2N5593	N	TO-72		PN5163-18	5072	TO-92	E113	N	TO-106	J113-18		5172	TO-92
2N5594	N	TO-72		PN5163-18	5072	TO-92	E114	N	TO-106	J114-18		9072	TO-92
2N5638	N	TO-92	2N5638		5172	TO-92	E174	N	TO-106	J174-18		8874	TO-92
2N5639	N	TO-92	2N5639		5172	TO-92	E175	N	TO-106	J175-18		8874	TO-92
2N5640	N	TO-92	2N5640		5172	TO-92	E176	N	TO-106	J176-18		8874	TO-92
2N5653	N	TO-92	2N5653		5172	TO-92	E177	N	TO-106	J177-18		8874	TO-92
2N5654	N	TO-92	2N5654		5172	TO-92	E201	N	TO-106	J201-18		5272	TO-92