N-CHANNEL JFETs

T-39-05

TO-92/TO-226AA

ELECTRICAL CHARACTERISTICS at T_A = 25°C

Device Type	$V_{(BR)GSS}$		I_{GSS}		$V_{GS(off)}$ Limits		$V_{GS(off)}$ Conditions		I_{DSS}			g_{fs}			C_{iss}[1]		C_{rss}[1]		r_{DS}	Pin-ning
	Min. (V)	@I_G (μA)	Max. (nA)	@V_{DS} (V)	Min. (V)	Max. (V)	V_{DS} (V)	I_D (nA)	Min. (mA)	Max. (mA)	@V_{DS} (V)	Min. (mS)	Max. (mS)	@V_{DS} (V)	Max. (pF)	@V_{DS} (V)	Max. (pF)	@V_{DS} (V)	Max. (Ω)	1, 2, 3
2N3819	-25	-1.0	-2.0	-15	—	-8.0	15	2.0	2.0	20	15	2.0	6.5	15	8.0	15	4.0	15	—	DGS†
TP3821	-50	-1.0	-1.0	-30	—	-4.0	10	1.0	0.5	2.5	15	1.5	4.5	15	6.0	15	2.0	15	—	DSG‡
TP3822	-50	-1.0	-1.0	-30	—	-6.0	10	1.0	2.0	10	15	3.0	6.5	15	6.0	15	2.0	15	—	DSG‡
TP3823	-30	-1.0	-1.0	-20	—	-8.0	10	1.0	4.0	20	15	3.5	6.5	15	6.0	15	2.0	15	—	DSG‡
TP3824	-50	-1.0	-1.0	-30	—	-8.0	15	0.5	4.0	20	15	3.5	6.5	15	6.0	15	2.0	15	250	DSG‡
TP4091	-40	-1.0	-1.0	-20	-5.0	-10	20	1.0	30	—	20	—	—	—	16	20	5.0	-20[3]	30	DSG‡
TP4092	-40	-1.0	-1.0	-20	-2.0	-7.0	20	1.0	15	—	20	—	—	—	16	20	5.0	-20[3]	50	DSG‡
TP4093	-40	-1.0	-1.0	-20	-1.0	-5.0	20	1.0	8.0	—	20	—	—	—	16	20	5.0	-20[3]	80	DSG‡
TP4117	-40	-1.0	-0.01	-20	-0.6	-1.8	10	1.0	0.03	0.09	10	0.07	0.21	10	3.0	10	1.5	10	—	DSG‡
TP4118	-40	-1.0	-0.01	-20	-1.0	-3.0	10	1.0	0.08	0.24	10	0.08	0.25	10	3.0	10	1.5	10	—	DSG‡
TP4119	-40	-1.0	-0.01	-20	-2.0	-6.0	10	1.0	0.2	0.6	10	0.10	0.33	10	3.0	10	1.5	10	—	DSG‡
TP4220	-30	-1.0	-10	-15	—	-4.0	15	1.0	0.5	3.0	15	1.0	4.0	15	6.0	15	2.0	15	—	DSG‡
TP4221	-30	-1.0	-10	-15	—	-6.0	15	1.0	2.0	6.0	15	2.0	5.0	15	6.0	15	2.0	15	—	DSG‡
TP4222	-30	-1.0	-10	-15	—	-8.0	15	1.0	5.0	15	15	2.5	6.0	15	6.0	15	2.0	15	—	DSG‡
TP4223	-30	-1.0	-10	-20	—	-8.0	15	1.0	3.0	18	15	3.0	7.0	15	6.0	15	2.0	15	—	DSG‡
TP4224	-30	-1.0	-10	-20	—	-8.0	15	1.0	2.0	20	15	2.0	7.5	15	6.0	15	2.0	15	—	DSG‡
TP4391	-40	-1.0	-1.0	-20	-4.0	-10	20	1.0	50	150	20	—	—	—	16	20	5.0	-12[3]	30	DSG‡
TP4392	-40	-1.0	-1.0	-20	-2.0	-5.0	20	1.0	25	100	20	—	—	—	16	20	5.0	-7.0[3]	60	DSG‡
TP4393	-40	-1.0	-1.0	-20	-0.5	-3.0	20	1.0	5.0	30	20	—	—	—	16	20	5.0	-5.0[3]	100	DSG‡
TP4416	-30	-1.0	-1.0	-20	—	-6.0	15	1.0	5.0	15	15	4.5	7.5	15	4.5	15	1.2	15	—	DSG‡
TP4416A	-35	-1.0	-1.0	-20	-2.5	-6.0	15	1.0	5.0	15	15	4.5	7.5	15	4.5	15	1.2	15	—	DSG‡
TP4856	-40	-1.0	-1.0	-20	-4.0	-10	15	1.0	50	—	15	—	—	—	18	-10[3]	8.0	-10[3]	25	DSG‡
TP4857	-40	-1.0	-1.0	-20	-2.0	-6.0	15	1.0	20	100	15	—	—	—	18	-10[3]	8.0	-10[3]	40	DSG‡
TP4858	-40	-1.0	-1.0	-20	-0.8	-4.0	15	1.0	8.0	80	15	—	—	—	18	-10[3]	8.0	-10[3]	60	DSG‡
TP4859	-30	-1.0	-1.0	-15	-4.0	-10	15	1.0	50	—	15	—	—	—	18	-10[3]	8.0	-10[3]	25	DSG‡
TP4860	-30	-1.0	-1.0	-15	-2.0	-6.0	15	1.0	20	100	15	—	—	—	18	-10[3]	8.0	-10[3]	40	DSG‡
TP4861	-30	-1.0	-1.0	-15	-0.8	-4.0	15	1.0	8.0	80	15	—	—	—	18	-10[3]	8.0	-10[3]	60	DSG‡
TP5163	-25	-1.0	-10	-15	-0.4	-8.0	15	-1.0[2]	1.0	40	15	2.0	9.0	15	12	15	3.0	15	—	DSG‡
TP5245	-30	-1.0	-1.0	-20	-1.0	-6.0	15	10	5.0	15	15	4.0	—	15	4.5	15	1.5	15	—	DSG‡
TP5246	-30	-1.0	-1.0	-20	-0.5	-4.0	15	10	1.5	7.0	15	2.5	—	15	4.5	15	1.5	15	—	DSG‡
TP5247	-30	-1.0	-1.0	-20	-1.5	-8.0	15	10	8.0	24	15	4.0	—	15	4.5	15	1.5	15	—	DSG‡
TP5248	-30	-1.0	-5.0	-20	-1.0	-8.0	15	10	4.0	20	15	3.0	—	15	6.0	15	2.0	15	—	DSG‡
TP5358	-40	-1.0	-1.0	-20	-0.5	-3.0	15	100	0.5	1.0	15	1.0	3.0	15	6.0	15	2.0	15	—	DSG‡
TP5359	-40	-1.0	-1.0	-20	-0.8	-4.0	15	100	0.6	1.6	15	1.2	3.6	15	6.0	15	2.0	15	—	DSG‡
TP5360	-40	-1.0	-1.0	-20	-0.8	-4.0	15	100	1.5	3.0	15	1.4	4.2	15	6.0	15	2.0	15	—	DSG‡
TP5361	-40	-1.0	-1.0	-20	-1.0	-6.0	15	100	2.5	5.0	15	1.5	4.5	15	6.0	15	2.0	15	—	DSG‡
TP5362	-40	-1.0	-1.0	-20	-2.0	-7.0	15	100	4.0	8.0	15	2.0	5.5	15	6.0	15	2.0	15	—	DSG‡
TP5363	-40	-1.0	-1.0	-20	-2.5	-8.0	15	100	7.0	14	15	2.5	6.0	15	6.0	15	2.0	15	—	DSG‡
TP5364	-40	-1.0	-1.0	-20	-2.5	-8.0	15	100	9.0	18	15	2.7	6.5	15	6.0	15	2.0	15	—	DSG‡
2N5457	-25	-10	-1.0	-15	-0.5	-6.0	15	10	1.0	5.0	15	1.0	5.0	15	7.0	15	3.0	15	—	DSG‡

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Continued next page...

1) V_{GS} = 0 V.
2) I_D in μA.
3) V_{DS} = 0 V, V_{GS} in volts.
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5) I_D = 5.0 mA.
6) I_D = 1.0 mA.
7) I_D = 500 μA.
8) I_D = 200 μA.

N-CHANNEL JFETs
TO-92/TO-226AA

T-39-05

ELECTRICAL CHARACTERISTICS continued

Device Type	$V_{(BR)GSS}$		I_{GSS}		$V_{GS(off)}$ Limits		$V_{GS(off)}$ Conditions		I_{DSS}			g_{fs}			C_{iss} †		C_{rss} †		r_{DS}	Pinning 1, 2, 3
	Min. (V)	@I_G (μA)	Max. (nA)	@V_{DS} (V)	Min. (V)	Max. (V)	V_{DS} (V)	I_D (nA)	Min. (mA)	Max. (mA)	@V_{DS} (V)	Min. (mS)	Max. (mS)	@V_{DS} (V)	Max. (pF)	@V_{DS} (V)	Max. (pF)	@V_{DS} (V)	Max. (Ω)	
2N5458	-25	-10	-1.0	-15	-1.0	-7.0	15	10	2.0	9.0	15	1.5	5.5	15	7.0	15	3.0	15	—	DSG‡
2N5459	-25	-10	-1.0	-15	-2.0	-8.0	15	10	4.0	16	15	2.0	6.0	15	7.0	15	3.0	15	—	DSG‡
2N5484	-25	-1.0	-1.0	-20	-0.3	-3.0	15	10	1.0	5.0	15	3.0	6.0	15	5.0	15	1.2	15	—	DSG‡
2N5485	-25	-1.0	-1.0	-20	-0.5	-4.0	15	10	4.0	10	15	3.5	7.0	15	5.0	15	1.2	15	—	DSG‡
2N5486	-25	-1.0	-1.0	-20	-2.0	-6.0	15	10	8.0	20	15	4.0	8.0	15	5.0	15	1.2	15	—	DSG‡
2N5638	-30	-1.0	-10	-15	—	-12	15	1.0	50	—	20	—	—	—	10	-12[3]	4.0	-12[3]	30	DSG‡
2N5639	-30	-1.0	-10	-15	—	-8.0	15	1.0	25	—	20	—	—	—	10	-12[3]	4.0	-12[3]	60	DSG‡
2N5640	-30	-1.0	-10	-15	—	-6.0	15	1.0	5.0	—	20	—	—	—	10	-12[3]	4.0	-12[3]	100	DSG‡
2N5653	-30	-1.0	-10	-15	—	-12	15	1.0	40	—	20	—	—	—	10	-12[3]	3.5	-12[3]	50	DSG‡
2N5654	-25	-1.0	-10	-15	—	-8.0	15	1.0	15	—	20	—	—	—	10	-8.0[3]	3.5	-8.0[3]	100	DSG‡
TP5668	-25	-10	-1.0	-15	-0.2	-4.0	15	10	1.0	5.0	15	1.0	—	15	7.0	15	3.0	15	—	DSG‡
TP5669	-25	-10	-1.0	-15	-1.0	-6.0	15	10	4.0	10	15	1.6	—	15	7.0	15	3.0	15	—	DSG‡
TP5670	-25	-10	-1.0	-15	-2.0	-8.0	15	10	8.0	20	15	2.0	—	15	7.0	15	3.0	15	—	DSG‡
TP5949	-30	-1.0	-1.0	-15	-3.0	-7.0	15	100	12	18	15	3.0	—	15	6.0	15	2.0	15	—	DSG‡
TP5950	-30	-1.0	-1.0	-15	-2.5	-6.0	15	100	10	15	15	3.0	—	15	6.0	15	2.0	15	—	DSG‡
TP5951	-30	-1.0	-1.0	-15	-2.0	-5.0	15	100	7.0	13	15	3.0	—	15	6.0	15	2.0	15	—	DSG‡
TP5952	-30	-1.0	-1.0	-15	-1.3	-3.5	15	100	4.0	8.0	15	1.0	—	15	6.0	15	2.0	15	—	DSG‡
TP5953	-30	-1.0	-1.0	-15	-0.8	-3.0	15	100	2.5	5.0	15	1.0	—	15	6.0	15	2.0	15	—	DSG‡
BF244A	-30	-1.0	-5	-20	-0.5	-8.0	15	10	2.0	6.5	15	3.0	6.5	15	—	—	—	—	—	DGS†
BF244B	-30	-1.0	-5	-20	-0.5	-8.0	15	10	6.0	15	15	3.0	6.5	15	—	—	—	—	—	DGS†
BF244C	-30	-1.0	-5	-20	-0.5	-8.0	15	10	12	25	15	3.0	6.5	15	—	—	—	—	—	DGS†
BF246A	-25	-1.0	-5	-15	-0.6	-14.5	15	10	30	80	15	—	—	—	—	—	—	—	65	DGS†
BF246B	-25	-1.0	-5	-15	-0.6	-14.5	15	10	60	140	15	—	—	—	—	—	—	—	50	DGS†
BF246C	-25	-1.0	-5	-15	-0.6	-14.5	15	10	110	250	15	—	—	—	—	—	—	—	35	DGS†
BF256A	-30	-1.0	-5	-20	-0.5	-7.5	15	10	3.0	7.0	15	4.5	—	15	4.5	15	1.2	15	—	DGS†
BF256B	-30	-1.0	-5	-20	-0.5	-7.5	15	10	6.0	13	15	4.5	—	15	4.5	15	1.2	15	—	DGS†
BF256C	-30	-1.0	-5	-20	-0.5	-7.5	15	10	11	18	15	4.5	—	15	4.5	15	1.2	15	—	DGS†
BFR30	-25	-1.0	-0.2	-10	—	-5.0	10	0.5	4.0	10	10	1.0	4.0	10^6	5.0	10^6	1.5	10^6	—	DSG‡
BFR31	-25	-1.0	-0.2	-10	—	-2.5	10	0.5	1.0	5.0	10	1.5	4.5	10^6	5.0	10^6	1.5	10^6	—	DSG‡
J111	-35	-1.0	-1.0	-15	-3.0	-10	5.0	1.0[2]	20	—	15	—	—	—	16	15	5	-10[3]	30	DSG‡
J112	-35	-1.0	-1.0	-15	-1.0	-5.0	5.0	1.0[2]	5.0	—	15	—	—	—	16	15	5	-10[3]	50	DSG‡
J112A	-40	-1.0	-0.2	-15	-2.0	-7.0	5.0	1.0[2]	15	—	15	—	—	—	16	15	5	-10[3]	50	DSG‡
J113	-35	-1.0	-1.0	-15	—	-3.0	5.0	1.0[2]	2.0	—	15	—	—	—	16	15	5	-10[3]	100	DSG‡
J113A	-40	-1.0	-0.2	-15	-1.0	-5.0	5.0	1.0[2]	8.0	—	15	—	—	—	16	15	5	-10[3]	80	DSG‡
J201	-40	-1.0	-0.1	-20	-0.3	-1.5	20	10	0.2	1.0	20	0.5	—	20	4.0	20	1.0	20	—	DSG
J202	-40	-1.0	-0.1	-20	-0.8	-4.0	20	10	0.9	4.5	20	1.0	—	20	4.0	20	1.0	20	—	DSG
J203	-40	-1.0	-0.1	-20	-2.0	-10	20	10	4.0	20	20	1.5	—	20	6.0	20	1.2	20	—	DSG
J230	-40	-1.0	-0.2	-30	-0.5	-3.0	20	1.0[2]	0.7	3.0	20	1.0	3.5	20	—	—	—	—	—	DSG
J231	-40	-1.0	-0.2	-30	-1.5	-5.0	20	1.0[2]	2.0	6.0	20	1.5	4.0	20	—	—	—	—	—	DSG
J232	-40	-1.0	-0.2	-30	-3.0	-6.0	20	1.0[2]	5.0	10	20	2.5	5.0	20	—	—	—	—	—	DSG
J304	-30	-1.0	-0.1	-20	-2.0	-6.0	15	1.0	5.0	15	15	4.5	7.5	15	—	—	—	—	—	DSG

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2) I_D in μA.
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Continued next page...

N-CHANNEL JFETs
TO-92/TO-226AA

T-39-05

ELECTRICAL CHARACTERISTICS continued

Device Type	$V_{(BR)GSS}$		I_{GSS}		$V_{GS(off)}$ Limits		$V_{GS(off)}$ Conditions		I_{DSS}			g_{fs}			C_{iss}[1]		C_{rss}[1]		r_{DS}	Pinning 1, 2, 3
	Min. (V)	@I_G (µA)	Max. (nA)	@V_{DS} (V)	Min. (V)	Max. (V)	V_{DS} (V)	I_D (nA)	Min. (mA)	Max. (mA)	@V_{DS} (V)	Min. (mS)	Max. (mS)	@V_{DS} (V)	Max. (pF)	@V_{DS} (V)	Max. (pF)	@V_{DS} (V)	Max. (Ω)	
J305	-30	-1.0	-0.1	-20	-0.5	-3.0	15	1.0	1.0	8.0	15	3.0	—	15	—	—	—	—	—	DSG‡
TPJ308	-25	-1.0	-1.0	-15	-1.0	-6.5	10	1.0	12	60	10	8.0	—	10^4	7.5	-10^3	3.5	-10^3	—	DSG‡
TPJ309	-25	-1.0	-1.0	-15	-1.0	-4.0	10	1.0	12	30	10	10	—	10^4	7.5	-10^3	7.5	-10^3	—	DSG‡
TPJ310	-25	-1.0	-1.0	-15	-2.0	-6.5	10	1.0	24	60	10	8.0	—	10^4	7.5	-10^3	7.5	-10^3	—	DSG‡
TPU308	-25	-1.0	-1.0	-15	-1.0	-6.0	10	1.0	12	60	10	—	—	—	7.5	-10^3	3.5	-10^3	—	DSG‡
TPU309	-25	-1.0	-1.0	-15	-1.0	-4.0	10	1.0	12	30	10	—	—	—	7.5	-10^3	3.5	-10^3	—	DSG‡
TPU310	-25	-1.0	-1.0	-15	-2.5	-6.0	10	1.0	24	60	10	—	—	—	7.5	-10^3	3.5	-10^3	—	DSG‡
TPU1897	-40	-1.0	-0.4	-20	-5.0	-10	20	1.0	30	—	20	—	—	—	16	20	3.5	20	30	DSG‡
TPU1898	-40	-1.0	-0.4	-20	-2.0	-7.0	20	1.0	15	—	20	—	—	—	16	20	3.5	20	50	DSG‡
TPU1899	-40	-1.0	-0.4	-20	-1.0	-5.0	20	1.0	8.0	—	20	—	—	—	16	20	3.5	20	80	DSG‡

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