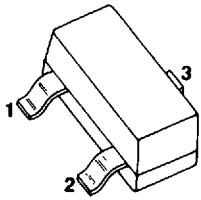
N-CHANNEL JFETs



SOT-23/TO-236AB

ELECTRICAL CHARACTERISTICS at T_A = 25°C

Device Type	$V_{(BR)GSS}$ Min. (V)	$V_{(BR)GSS}$ @I_G (μA)	I_{GSS} Max. (nA)	I_{GSS} @ V_{DS} (V)	$V_{GS(off)}$ Limits Min. (V)	$V_{GS(off)}$ Limits Max. (V)	$V_{GS(off)}$ Conditions V_{DS} (V)	$V_{GS(off)}$ Conditions I_D (nA)	I_{DSS} Min. (mA)	I_{DSS} Max. (mA)	I_{DSS} @ V_{DS} (V)	g_{fs} Min. (mS)	g_{fs} Max. (mS)	g_{fs} @ V_{DS} (V)	C_{iss}[1] Max. (pF)	C_{iss}[1] @ V_{DS} (V)	C_{rss}[1] Max. (pF)	C_{rss}[1] @ V_{DS} (V)	r_{DS} Max. (Ω)	Pinning 1, 2, 3
TMPF3819	-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	—	DSG
TMPF3821	-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
TMPF3822	-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
TMPF3823	-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
TMPF3824	-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
TMPF4091	-40	-1.0	-1.0	-20	-5.0	-10	20	1.0	30	—	20	—	—	—	16	20	5.0	-20[3]	30	DSG
TMPF4092	-40	-1.0	-1.0	-20	-2.0	-7.0	20	1.0	15	—	20	—	—	—	16	20	5.0	-20[3]	50	DSG
TMPF4093	-40	-1.0	-1.0	-20	-1.0	-5.0	20	1.0	8.0	—	20	—	—	—	16	20	5.0	-20[3]	80	DSG
TMPF4117	-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
TMPF4118	-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
TMPF4119	-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
TMPF4220	-30	-10	-1.0	-15	—	-4.0	15	1.0	0.5	3.0	15	1.0	4.0	15	6.0	15	2.0	15	—	DSG
TMPF4221	-30	-10	-1.0	-15	—	-6.0	15	1.0	2.0	6.0	15	2.0	5.0	15	6.0	15	2.0	15	—	DSG
TMPF4222	-30	-10	-1.0	-15	—	-8.0	15	1.0	5.0	15	15	2.5	6.0	15	6.0	15	2.0	15	—	DSG
TMPF4223	-30	-10	-1.0	-20	—	-8.0	15	1.0	3.0	18	15	3.0	7.0	15	6.0	15	2.0	15	—	DSG
TMPF4224	-30	-10	-1.0	-20	—	-8.0	15	1.0	2.0	20	15	2.0	7.5	15	6.0	15	2.0	15	—	DSG
TMPF4391	-40	-1.0	-1.0	-20	-4.0	-10	20	1.0	50	150	20	—	—	—	16	20	5.0	-12[3]	30	DSG
TMPF4392	-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
TMPF4393	-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
TMPF4416	-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
TMPF4416A	-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
TMPF4856	-40	-1.0	-1.0	-20	-4.0	-10	15	1.0	50	—	15	—	—	—	18	-10[3]	8.0	-10[3]	25	DSG
TMPF4857	-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
TMPF4858	-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
TMPF4859	-30	-1.0	-1.0	-15	-4.0	-10	15	1.0	50	—	15	—	—	—	18	-10[3]	8.0	-10[3]	25	DSG
TMPF4860	-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
TMPF4861	-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
TMPF5163	-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
TMPF5245	-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
TMPF5246	-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
TMPF5247	-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
TMPF5248	-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
TMPF5358	-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
TMPF5359	-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
TMPF5360	-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

NOTES: 1) V_{GS} = 0 V.
2) I_D in μA.
3) V_{DS} = 0 V, V_{GS} in volts.
4) I_D = 10 μA.
5) I_D = 5.0 μA.
6) I_D = 1.0 mA.
7) I_D = 500 μA.
8) I_D = 200 μA.

Continued next page...

N-CHANNEL JFETs
SOT-23/TO-236AB

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}	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
TMPF5361	-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
TMPF5362	-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
TMPF5363	-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
TMPF5364	-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
TMPF5457	-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
TMPF5458	-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
TMPF5459	-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
TMPF5484	-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	1.0	15	—	DSG
TMPF5485	-25	-1.0	-1.0	-20	-0.5	-4.0	15	10	4.0	10	15	3.5	7.0	15	5.0	15	1.0	15	—	DSG
TMPF5486	-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
TMPF5638	-30	-10	-1.0	-15	—	-12	15	1.0	50	—	20	—	—	—	10	-12^3	4.0	-12^3	30	DSG
TMPF5639	-30	-10	-1.0	-15	—	-8.0	15	1.0	25	—	20	—	—	—	10	-12^3	4.0	-12^3	60	DSG
TMPF5640	-30	-10	-1.0	-15	—	-6.0	15	1.0	5.0	—	20	—	—	—	10	-12^3	4.0	-12^3	100	DSG
TMPF5653	-30	-10	-1.0	-15	—	-12	15	1.0	40	—	20	—	—	—	10	-12^3	3.5	-12^3	50	DSG
TMPF5654	-25	-10	-10	-15	—	-8.0	15	1.0	15	—	20	—	—	—	10	-8.0^3	3.5	-8.0^3	100	DSG
TMPF5668	-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
TMPF5669	-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
TMPF5670	-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
TMPF5949	-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
TMPF5950	-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
TMPF5951	-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
TMPF5952	-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
TMPF5953	-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
TMPFBC264A	-30	-1.0	-10	-20	-0.5	—	15	10	2.0	4.5	15	2.5	—	15	4.0	15	1.2	15	—	DSG
TMPFBC264B	-30	-1.0	-10	-20	-0.5	—	15	10	3.5	6.5	15	3.0	—	15	4.0	15	1.2	15	—	DSG
TMPFBC264C	-30	-1.0	-10	-20	-0.5	—	15	10	5.0	8.0	15	3.5	—	15	4.0	15	1.2	15	—	DSG
TMPFBC264D	-30	-1.0	-10	-20	-0.5	—	15	10	7.0	12	15	4.0	—	15	4.0	15	1.2	15	—	DSG
TMPFBF244A	-30	-1.0	-5.0	-20	-0.5	-8.0	15	10	2.0	6.5	15	3.0	6.5	15	—	—	—	—	—	DSG
TMPFBF244B	-30	-1.0	-5.0	-20	-0.5	-8.0	15	10	6.0	15	15	3.0	6.5	15	—	—	—	—	—	DSG
TMPFBF244C	-30	-1.0	-5.0	-20	-0.5	-8.0	15	10	12	25	15	3.0	6.5	15	—	—	—	—	—	DSG
TMPFBF246A	-25	-1.0	-5.0	-15	-0.6	-14.5	15	10	30	80	15	—	—	—	—	—	—	—	65	DSG
TMPFBF246B	-25	-1.0	-5.0	-15	-0.6	-14 5	15	10	60	140	15	—	—	—	—	—	—	—	50	DSG
TMPFBF246C	-25	-1.0	-5.0	-15	-0.6	-14.5	15	10	110	250	15	—	—	—	—	—	—	—	35	DSG
TMPFBF256A	-30	-1.0	-5.0	-20	-0.5	-7.5	15	10	3.0	7.0	15	4.5	—	15	4.5	15	1.2	15	—	DSG
TMPFBF256B	-30	-1.0	-5.0	-20	-0.5	-7.5	15	10	6.0	13	15	4.5	—	15	4.5	15	1.2	15	—	DSG
TMPFBF256C	-30	-1.0	-5.0	-20	-0.5	-7.5	15	10	11	18	15	4.5	—	15	4.5	15	1.2	15	—	DSG
TMPFJ111	-35	-1.0	-1.0	-15	-3.0	-10	5.0	1.0	20	—	15	—	—	—	16	15	5	-10^3	30	DSG
TMPFJ112	-35	-1.0	-1.0	-15	-1.0	-5.0	5.0	1.0	5.0	—	15	—	—	—	16	15	5	-10^3	50	DSG
TMPFJ112A	-40	-1.0	-0.2	-1.0	-2.0	-7.0	5.0	1.0	15	—	15	—	—	—	16	15	5	-10^3	50	DSG
TMPFJ113	-35	-1.0	-1.0	-15	—	-3.0	5.0	1.0	2.0	—	15	—	—	—	16	15	5	-10^3	100	DSG

Continued next page...

NOTES: 1) V_{GS} = 0 V.
2) I_D in μA.
3) V_{DS} = 0 V, V_{GS} in volts.
4) I_D = 10 μA.
5) I_D = 5.0 μA.
6) I_D = 1.0 mA.
7) I_D = 500 μA.
8) I_D = 200 μA.

N-CHANNEL JFETs
SOT-23/TO-236AB

ELECTRICAL CHARACTERISTICS continued

Device Type	$V_{(BR)GSS}$ Min. (V)	$V_{(BR)GSS}$ @I_G (μA)	I_{GSS} Max. (nA)	I_{GSS} @ V_{DS} (V)	$V_{GS(off)}$ Limits Min. (V)	$V_{GS(off)}$ Limits Max. (V)	$V_{GS(off)}$ Conditions V_{DS} (V)	$V_{GS(off)}$ Conditions I_D (nA)	I_{DSS} Min. (mA)	I_{DSS} Max. (mA)	I_{DSS} @ V_{DS} (V)	g_{fs} Min. (mS)	g_{fs} Max. (mS)	g_{fs} @ V_{DS} (V)	C_{iss}[1] Max. (pF)	C_{iss}[1] @ V_{DS} (V)	C_{rss}[1] Max. (pF)	C_{rss}[1] @ V_{DS} (V)	r_{DS} Max. (Ω)	Pin-ning 1, 2, 3
TMPFJ113A	-40	-1.0	-0 2	-1.0	-1 0	-5.0	5.0	1 0	8.0	—	15	—	—	—	16	15	5	-10^3	80	DSG
TMPFJ201	-40	-1.0	-1.0	-20	-0.3	-1.5	20	10	0.2	1 0	20	0.5	—	20	4 0	20	1 0	20	—	DSG
TMPFJ202	-40	-1.0	-1.0	-20	-0.8	-4.0	20	10	0 9	4 5	20	1.0	—	20	4 0	20	1 0	20	—	DSG
TMPFJ203	-40	-1.0	-1.0	-20	-2.0	-10	20	10	4.0	20	20	1.5	—	20	6 0	20	1 2	20	—	DSG
TMPFJ230	-40	-1.0	-1.0	-30	-0.5	-3.0	20	1^2	0 7	3.0	20	1.0	3.5	20	—	—	—	—	—	DSG
TMPFJ231	-40	-1.0	-1 0	-30	-1.5	-5 0	20	1^2	2.0	6 0	20	1.5	4.0	20	—	—	—	—	—	DSG
TMPFJ232	-40	-1 0	-1 0	-30	-3.0	-6 0	20	1^2	5.0	10	20	2.5	5.0	20	—	—	—	—	—	DSG
TMPFJ304	-30	-1 0	-1 0	20	-2.0	-6 0	15	1.0	5.0	15	15	4.5	7.5	15	—	—	—	—	—	DSG
TMPFJ305	-30	-1.0	-1.0	-20	-0.5	-3.0	15	1.0	1.0	8.0	15	3.0	—	15	—	—	—	—	—	DSG
TMPFJ308	-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
TMPFJ309	-25	-1.0	-1.0	-15	-1.0	-4.0	10	1.0	12	30	10	10	—	10^4	7 5	-10^3	3 5	-10^3	—	DSG
TMPFJ310	-25	-1.0	-1.0	-15	-2.0	-6.5	10	1.0	24	60	10	8 0	—	10^4	7 5	-10^3	3 5	-10^3	—	DSG
TMPFU308	-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
TMPFU309	-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
TMPFU310	-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
TMPFU1897	-40	-1.0	-1 0	-20	-5.0	-10	20	1 0	30	—	20	—	—	—	16	20	3.5	20	30	DSG
TMPFU1898	-40	-1 0	-1.0	-20	-2.0	-7.0	20	1.0	15	—	20	—	—	—	16	20	3.5	20	50	DSG
TMPFU1899	-40	-1.0	-1.0	-20	-1.0	-5 0	20	1 0	8.0	—	20	—	—	—	16	20	3.5	20	80	DSG

NOTES: 1) V_{GS} = 0 V.
2) I_D in μA.
3) V_{DS} = 0 V, V_{GS} in volts.
4) I_D = 10 μA
5) I_D = 5.0 μA
6) I_D = 1.0 mA
7) I_D = 500 μA
8) I_D = 200 μA