

8514019 SPRAGUE, SEMICONDS/ICS

93D 03615 D

T-29-25

METAL-CASE JUNCTION FIELD-EFFECT TRANSISTORS

N-Channel JFETs

Switches

ELECTRICAL CHARACTERISTICS at T_A = 25°C

Device Type	V _{(BR)GSS}		I _{GSS}		V _{GS(off)}				I _{DSS}			C _{ISS} ¹		C _{RSS} ¹		r _{DS} Max. (Ω)	Process
					Limits		Conditions		Limits		Conditions	Max. (pF)	@V _{DS} (V)	Max. (pF)	@V _{DS} (V)		
	Min. (V)	@I _G (μA)	Max. (nA)	@V _{GS} (V)	Min. (V)	Max. (V)	V _{DS} (V)	I _D (nA)	Min. (mA)	Max. (mA)	@V _{DS} (V)						
2N3824	-50	-1.0	-0.1	-30	—	-8.0	15	1.0	—	—	—	6.0	15	3.0	-8.0 ³	250	NJ32
2N3966	-30	-1.0	-0.1	-20	-4.0	-6.0	10	10	2.0	—	20	6.0	20	1.5	-7.0 ³	220	NJ32
2N3970	-40	-1.0	-0.3	-20	-4.0	-10	20	1.0	50	150	20	25	20	6.0	-12 ³	30	NJ132
2N3971	-40	-1.0	-0.3	-20	-2.0	-5.0	20	1.0	25	75	20	25	20	6.0	-12 ³	60	NJ132
2N3972	-40	-1.0	-0.3	-20	-0.5	-3.0	20	1.0	5.0	30	20	25	20	6.0	-12 ³	100	NJ132
2N4091	-40	-1.0	-0.5	-20	-5.0	-10	20	1.0	30	—	20	16	20	5.0	-20 ³	30	NJ132
2N4092	-40	-1.0	-0.5	-20	-2.0	-7.0	20	1.0	15	—	20	16	20	5.0	-20 ³	50	NJ132
2N4093	-40	-1.0	-0.5	-20	-1.0	-5.0	20	1.0	8.0	—	20	16	20	5.0	-20 ³	80	NJ132
2N4391	-40	-1.0	-0.1	-20	-4.0	-10	20	1.0	50	150	20	16	20	5.0	-12 ³	30	NJ132
2N4392	-40	-1.0	-0.1	-20	-2.0	-5.0	20	1.0	25	75	20	16	20	5.0	-7.0 ³	60	NJ132
2N4393	-40	-1.0	-0.1	-20	-0.5	-3.0	20	1.0	5.0	30	20	16	20	5.0	-5.0 ³	100	NJ132
2N4856	-40	-1.0	-0.25	-20	-4.0	-10	15	1.0	50	—	15	18	-10 ³	8.0	-10 ³	25	NJ132
2N4856A	-40	-1.0	-0.25	-20	-4.0	-10	15	1.0	50	—	15	10	-10 ³	4.0	-10 ³	25	NJ132
2N4857	-40	-1.0	-0.25	-20	-2.0	-6.0	15	1.0	20	100	15	18	-10 ³	8.0	-10 ³	40	NJ132
2N4857A	-40	-1.0	-0.25	-20	-2.0	-6.0	15	1.0	20	100	15	10	-10 ³	3.5	-10 ³	40	NJ132
2N4858	-40	-1.0	-0.25	-20	-0.8	-4.0	15	1.0	8.0	80	15	18	-10 ³	8.0	-10 ³	40	NJ132
2N4858A	-40	-1.0	-0.25	-20	-0.8	-4.0	15	1.0	8.0	80	15	10	-10 ³	3.5	-10 ³	60	NJ132
2N4859	-30	-1.0	-0.25	-15	-4.0	-10	15	1.0	50	—	15	18	-10 ³	8.0	-10 ³	25	NJ132
2N4859A	-30	-1.0	-0.25	-15	-4.0	-10	15	1.0	50	—	15	10	-10 ³	4.0	-10 ³	25	NJ132
2N4860	-30	-1.0	-0.25	-15	-2.0	-6.0	15	1.0	20	100	15	18	-10 ³	8.0	-10 ³	40	NJ132
2N4860A	-30	-1.0	-0.25	-15	-2.0	-6.0	15	1.0	20	100	15	10	-10 ³	3.5	-10 ³	40	NJ132
2N4861	-30	-1.0	-0.5	-15	-0.8	-4.0	15	1.0	8.0	80	15	18	-10 ³	8.0	-10 ³	60	NJ132
2N4861A	-30	-1.0	-0.5	-15	-0.8	-4.0	15	1.0	8.0	80	15	10	-10 ³	3.5	-10 ³	60	NJ132
2N5432	-25	-1.0	-0.2	-15	-4.0	-10	5.0	3.0	150	—	15	30	-10 ³	15	-10 ³	5.0	NJ903
2N5433	-25	-1.0	-0.2	-15	-3.0	-9.0	5.0	3.0	100	—	15	30	-10 ³	15	-10 ³	7.0	NJ903
2N5434	-25	-1.0	-0.2	-15	-1.0	-4.0	5.0	3.0	30	—	15	30	-10 ³	15	-10 ³	10	NJ903

NOTES:

- 1) V_{GS} = 0 V.
- 2) I_D in μA.
- 3) V_{DS} = 0 V, V_{GS} in volts.

RF Amplifiers

ELECTRICAL CHARACTERISTICS at T_A = 25°C

Device Type	V _{(BR)GSS}		I _{GSS}		V _{GS(off)}				I _{DSS}			η _h			C _{ISS} ¹		C _{RSS} ¹		r _{DS} Max. (Ω)	Process
					Limits		Conditions		Limits		Conditions	Min. (mS)	Max. (mS)	@V _{DS} (V)	Max. (pF)	@V _{DS} (V)	Max. (pF)	@V _{DS} (V)		
	Min. (V)	@I _G (μA)	Max. (nA)	@V _{GS} (V)	Min. (V)	Max. (V)	V _{DS} (V)	I _D (nA)	Min. (mA)	Max. (mA)	@V _{DS} (V)									
2N3823	-30	-1.0	-0.5	-20	—	-8.0	10	1.0	4.0	20	15	3.5	6.5	15	6.0	15	2.0	15	—	NJ32
2N4223	-30	-1.0	-0.25	-20	—	-8.0	15	1.0	3.0	18	15	3.0	7.0	15	6.0	15	2.0	15	—	NJ32
2N4224	-30	-1.0	-0.5	-20	—	-8.0	15	1.0	2.0	20	15	2.0	7.5	15	6.0	15	2.0	15	—	NJ32
2N4416	-30	-1.0	-0.1	-20	—	-6.0	15	1.0	5.0	15	15	4.5	7.5	15	4.0	15	0.8	15	—	NJ26
2N4416A	-35	-1.0	-0.1	-20	-2.5	-6.0	15	1.0	5.0	15	15	4.5	7.5	15	4.0	15	0.8	15	—	NJ26
2N5078	-30	-1.0	-0.25	-20	-0.5	-8.0	15	1.0	4.0	25	15	4.0	—	15	6.0	15	2.0	15	—	NJ26
2N5397	-25	-1.0	-0.1	-15	-1.0	-6.0	10	1.0	10	30	10	6.0	10	10 ²	5.0	10 ²	1.2	10 ²	—	NJ26L
2N5398	-25	-1.0	-0.1	-15	-1.0	-6.0	10	1.0	5.0	40	10	5.5	10	10	5.5	10	1.3	10	—	NJ26L

NOTES:

- 1) V_{GS} = 0 V
- 2) I_D = 10 μA.