

8514019 SPRAGUE SEMICONDUCTORS/ICS

93D 03610 D

T-29-25

SMALL-OUTLINE JUNCTION FIELD-EFFECT TRANSISTORS

N-Channel JFETs

ELECTRICAL CHARACTERISTICS at $T_A = 25^\circ\text{C}$

Device Type	V _{(BR)SS}		I _{SS}		V _{GS(on)}				I _{DSS}			g _{fs}			C _{iss} ¹		C _{rss} ¹		r _{DS} Max. (Ω)	Process
					Limits		Conditions													
	Min. (V)	α I _G (μA)	Max. (nA)	α V _{GS} (V)	Min. (V)	Max. (V)	V _{DS} (V)	I _D (nA)	Min. (mA)	Max. (mA)	α V _{DS} (V)	Min. (mS)	Max. (mS)	α V _{DS} (V)	Max. (pF)	α V _{DS} (V)	Max. (pF)	α V _{DS} (V)		
TMPF4858A	-40	-1.0	-1.0	-20	-0.8	-4.0	15	1.0	8.0	80	15	—	—	—	10	-10 ³	3.5	-10 ³	60	NJ132
TMPF4859	-30	-1.0	-1.0	-15	-4.0	-10	15	1.0	50	—	15	—	—	—	18	-10 ³	8.0	-10 ³	25	NJ132
TMPF4859A	-30	-1.0	-1.0	-15	-4.0	-10	15	1.0	50	—	15	—	—	—	10	-10 ³	4.0	-10 ³	25	NJ132
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	NJ132
TMPF4860A	-30	-1.0	-1.0	-15	-2.0	-6.0	15	1.0	20	100	15	—	—	—	10	-10 ³	3.5	-10 ³	40	NJ132
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	NJ132
TMPF4861A	-30	-1.0	-1.0	-15	-0.8	-4.0	15	1.0	8.0	80	15	—	—	—	10	-10 ³	3.5	-10 ³	60	NJ132
TMPF4867	-40	-1.0	-1.0	-30	-0.7	-2.0	20	1.0 ²	0.4	1.2	20	0.7	2.0	20	25	20	5.0	20	—	NJ16
TMPF4868	-40	-1.0	-1.0	-30	-1.0	-3.0	20	1.0 ²	1.0	3.0	20	1.0	3.0	20	25	20	5.0	20	—	NJ16
TMPF4869	-40	-1.0	-1.0	-30	-1.8	-5.0	20	1.0 ²	2.5	7.5	20	1.3	4.0	20	25	20	5.0	20	—	NJ16
TMPF5078	-30	-1.0	-1.0	-20	-0.5	-8.0	15	1.0	4.0	25	15	4.0	—	15	6.0	15	2.0	15	—	NJ26
TMPF5103	-25	-1.0	-1.0	-15	-0.5	-4.0	15	1.0	1.0	8.0	15	2.0	8.0	15	5.0	15	1.2	15	—	NJ26
TMPF5104	-25	-1.0	-1.0	-15	-0.5	-4.0	15	1.0	2.0	6.0	15	3.5	7.5	15	5.0	15	1.2	15	—	NJ26
TMPF5105	-25	-1.0	-1.0	-15	-0.5	-4.0	15	1.0	5.0	15	15	5.0	10	15	5.0	15	1.2	15	—	NJ26
TMPF5163	-25	-1.0	-1.0	-15	0.4	8.0	15	1.0 ²	1.0	40	15	2.0	9.0	15	12	15	3.0	15	—	NJ26
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	—	NJ26
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	—	NJ26
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	—	NJ26
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	—	NJ26
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	—	NJ16
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	—	NJ16
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	—	NJ16
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	—	NJ16
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	—	NJ32
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	—	NJ32
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	—	NJ32
TMPF5397	-25	-1.0	1.0	-15	-1.0	-6.0	10	1.0	10	30	10	6.0	10	10 ⁴	5.0	10 ⁴	1.2	10 ⁴	—	NJ26L
TMPF5398	-25	-1.0	-1.0	-15	-1.0	-6.0	10	1.0	5.0	40	10	5.5	10	10	5.5	10	1.3	10	—	NJ26L
TMPF5457	-25	-1.0	-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	—	NJ32
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	—	NJ32
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	—	NJ32
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	—	NJ26
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	—	NJ26
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	—	NJ26
TMPF5555	-25	-1.0	-1.0	-15	—	-12	12	10	15	—	15	—	—	—	5.0	15	1.2	-10 ³	—	NJ26
TMPF5556	-30	-1.0	-1.0	-15	-0.2	-4.0	15	1.0	0.5	2.5	15	1.5	6.5	15	6.0	15	3.0	15	—	NJ16
TMPF5557	-30	-1.0	-1.0	-15	-0.8	-5.0	15	1.0	2.0	5.0	15	1.5	6.5	15	6.0	15	3.0	15	—	NJ16
TMPF5558	-30	-1.0	-1.0	-15	-1.5	-6.0	15	1.0	4.0	10	15	1.5	6.5	15	6.0	15	3.0	15	—	NJ16
TMPF5638	-30	-10	-1.0	-15	—	-12	15	1.0	50	—	20	—	—	—	10	-12 ³	4.0	-12 ³	30	NJ132
TMPF5639	-30	-10	-1.0	-15	—	-8.0	15	1.0	25	—	20	—	—	—	10	-12 ³	4.0	-12 ³	60	NJ99
TMPF5640	-30	-10	-1.0	-15	—	-6.0	15	1.0	5.0	—	20	—	—	—	10	-12 ³	4.0	-12 ³	100	NJ99
TMPF5653	-30	-10	-1.0	-15	—	-12	15	1.0	40	—	20	—	—	—	10	-12 ³	3.5	-12 ³	50	NJ99
TMPF5654	-25	-10	-10	-15	—	-8.0	15	1.0	15	—	20	—	—	—	10	-8.0 ³	3.5	-8.0 ³	100	NJ99
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	—	NJ32
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	—	NJ32
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	—	NJ32
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	—	NJ32
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	—	NJ32

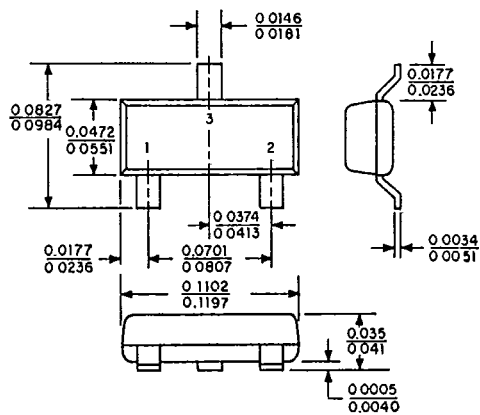
NOTES:

- $V_{GS} = 0$ V.
- I_D in μA .
- $V_{DS} = 0$ V, V_{GS} in volts.
- $I_D = 10$ μA .
- $I_D = 5.0$ μA .
- $I_D = 1.0$ mA.
- $I_D = 500$ μA .
- $I_D = 200$ μA .

TO-236AB/STYLE CK

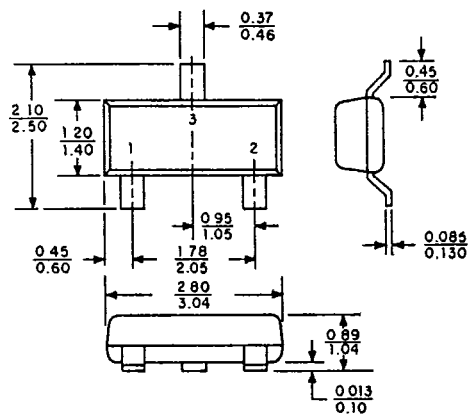
DIMENSIONS IN INCHES

Based on 25.4 mm = 1"

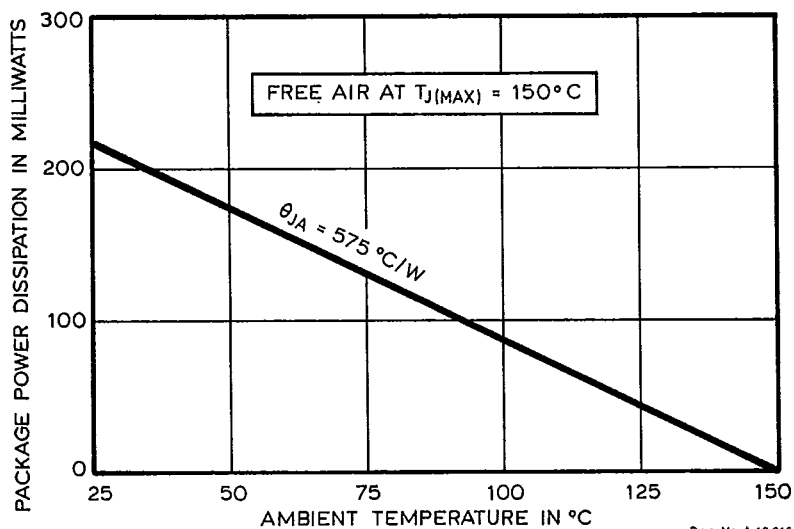


Dwg No. A-12,238B IN

DIMENSIONS IN MILLIMETERS

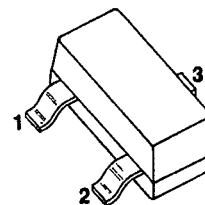


Dwg No A-12,238B MM

MAXIMUM ALLOWABLE PACKAGE POWER DISSIPATION
AS A FUNCTION OF AMBIENT TEMPERATURE

Dwg No A-13 616

Die size = 0.635 mm by 0.635 mm (0.025" by 0.025"). Other factors that determine allowable package power dissipation in application include circuit board material, pad size, and proximity of other heat producing circuit elements.



CK PINOUT

Pin	Terminal
1	Drain
2	Source
3	Gate