

8514019 SPRAGUE, SEMICONDUCTORS/ICS

93D 03600DT-29-25

PLASTIC-CASE JUNCTION FIELD-EFFECT TRANSISTORS

N-Channel JFETs

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

Device Type	V _{(BR)GSS}		I _{GSS}		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)		
TP3369	-40	-1.0	-1.0	-30	—	-6.5	20	1.0 ²	0.5	2.5	30	0.6	2.5	30	20	8.0	3.0	30	—	NJ16
TP3370	-40	-1.0	-1.0	-30	—	-3.2	20	1.0 ²	0.1	0.6	30	0.3	2.5	30	20	8.0	3.0	30	—	NJ16
TP3458	-50	-10	-1.0	-30	—	-7.8	20	1.0 ²	3.0	15	20	2.5	10	20	18	-10 ³	5.0	30	—	NJ32
TP3459	-50	-10	-1.0	-30	—	-3.4	20	1.0 ²	0.8	4.0	20	1.5	6.0	20	18	-8.0 ³	5.0	30	—	NJ16
TP3460	-50	-1.0	-1.0	-30	—	-1.8	20	1.0 ²	0.2	1.0	20	0.8	4.5	20	18	-4.0 ³	5.0	30	—	NJ16
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	—	NJ32
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	—	NJ16
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	—	NJ32
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	—	NJ32
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	NJ32
TP3966	-30	-1.0	-1.0	-20	-4.0	-6.0	10	1.0	2.0	—	20	—	—	—	6.0	20	1.5	-7.0 ³	220	NJ32
TP3967	-30	-1.0	-1.0	-20	-2.0	-5.0	20	1.0	2.5	10	20	2.5	—	20	5.0	20 ⁶	1.3	20 ⁶	—	NJ26
TP3967A	-30	-1.0	-1.0	-20	-2.0	-5.0	20	1.0	2.5	10	20	2.5	—	20	5.0	20 ⁶	1.3	20 ⁶	—	NJ26
TP3968	-30	-1.0	-1.0	-20	—	-3.0	20	1.0	1.0	5.0	20	2.0	—	20	5.0	20 ⁷	1.3	20 ⁷	—	NJ26
TP3968A	-30	-1.0	-1.0	-20	—	-3.0	20	1.0	1.0	5.0	20	2.0	—	20	5.0	20 ⁷	1.3	20 ⁷	—	NJ26
TP3969	-30	-1.0	-1.0	-20	—	-1.7	20	1.0	0.4	2.0	20	1.3	—	20	5.0	20 ⁸	1.3	20 ⁸	—	NJ16
TP3969A	-30	-1.0	-1.0	-20	—	-1.7	20	1.0	0.4	2.0	20	1.3	—	20	5.0	20 ⁸	1.3	20 ⁸	—	NJ16
TP3970	-40	-1.0	-1.0	-20	-4.0	-10	20	1.0	50	150	20	—	—	—	25	20	6.0	-12 ³	30	NJ132
TP3971	-40	-1.0	-1.0	-20	-2.0	-5.0	20	1.0	25	75	20	—	—	—	25	20	6.0	-12 ³	60	NJ132
TP3972	-40	-1.0	-1.0	-20	-0.5	-3.0	20	1.0	5.0	30	20	—	—	—	25	20	6.0	-12 ³	100	NJ132
TP4091	-40	-1.0	-1.0	-20	-5.0	-10	20	1.0	30	—	20	—	—	—	16	20	5.0	-20 ³	30	NJ132
TP4092	-40	-1.0	-1.0	-20	-2.0	-7.0	20	1.0	15	—	20	—	—	—	16	20	5.0	-20 ³	50	NJ132
TP4093	-40	-1.0	-1.0	-20	-1.0	-5.0	20	1.0	8.0	—	20	—	—	—	16	20	5.0	-20 ³	80	NJ132
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	—	NJ01
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	—	NJ01
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	—	NJ01
TP4220	-30	-1.0	-1.0	-15	—	-4.0	15	1.0	0.5	3.0	15	1.0	4.0	15	6.0	15	2.0	15	—	NJ16
TP4221	-30	-1.0	-1.0	-15	—	-6.0	15	1.0	2.0	6.0	15	2.0	5.0	15	6.0	15	2.0	15	—	NJ32
TP4222	-30	-1.0	-1.0	-15	—	-8.0	15	1.0	5.0	15	15	2.5	6.0	15	6.0	15	2.0	15	—	NJ32
TP4223	-30	-1.0	-1.0	-15	—	-8.0	15	1.0	3.0	18	15	3.0	7.0	15	6.0	15	2.0	15	—	NJ32
TP4224	-30	-1.0	-1.0	-20	—	-8.0	15	1.0	2.0	20	15	2.0	7.5	15	6.0	15	2.0	15	—	NJ32
TP4302	-30	-1.0	-1.0	-15	—	-4.0	20	10	0.5	5.0	20	1.0	—	20	6.0	20	3.0	20	—	NJ26
TP4303	-30	-1.0	-1.0	-15	—	-6.0	20	10	4.0	10	20	2.0	—	20	6.0	20	3.0	20	—	NJ26
TP4304	-30	-1.0	-1.0	-15	—	-10	20	10	0.5	15	20	1.0	—	20	6.0	20	3.0	20	—	NJ26
TP4338	-50	-1.0	-1.0	-30	-0.3	-1.0	15	100	0.2	0.6	15	0.6	1.8	15	7.0	15	3.0	15	2500	NJ16
TP4339	-50	-1.0	-1.0	-30	-0.6	-1.8	15	100	0.5	1.5	15	0.8	2.4	15	7.0	15	3.0	15	1700	NJ16
TP4340	-50	-1.0	-1.0	-30	-1.0	-3.0	15	100	1.2	3.6	15	1.3	3.0	15	7.0	15	3.0	15	1500	NJ16
TP4341	-50	-1.0	-1.0	-30	-2.0	-6.0	15	100	3.0	9.0	15	2.0	4.0	15	7.0	15	3.0	15	800	NJ16
TP4391	-40	-1.0	-1.0	-20	-4.0	-10	20	1.0	50	150	20	—	—	—	16	20	5.0	-12 ³	30	NJ132
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	NJ132
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	NJ132
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	—	NJ26
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	—	NJ26
TP4856	-40	-1.0	-1.0	-20	-4.0	-10	15	1.0	50	—	15	—	—	—	18	-10 ³	8.0	-10 ³	25	NJ132
TP4856A	-40	-1.0	-1.0	-20	-4.0	-10	15	1.0	50	—	15	—	—	—	10	-10 ³	4.0	-10 ³	25	NJ132
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	NJ132
TP4857A	-40	-1.0	-1.0	-20	-2.0	-6.0	15	1.0	20	100	15	—	—	—	10	-10 ³	3.5	-10 ³	40	NJ132
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	NJ132

NOTES:

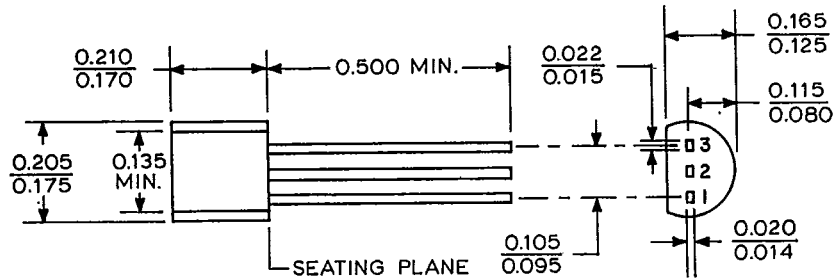
- 1) $V_{GS} = 0$ V.
- 2) I_D in μA .
- 3) $V_{DS} = 0$ V, V_{GS} in volts.
- 4) $I_D = 10$ mA.
- 5) $I_D = 5.0$ mA.
- 6) $I_D = 1.0$ mA.
- 7) $I_D = 500$ μA .
- 8) $I_D = 200$ μA .

T-91-20

PACKAGE INFORMATION

TO-226AA/STYLES CG AND CO

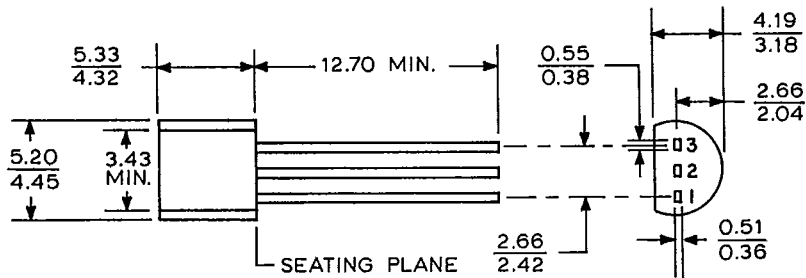
DIMENSIONS IN INCHES



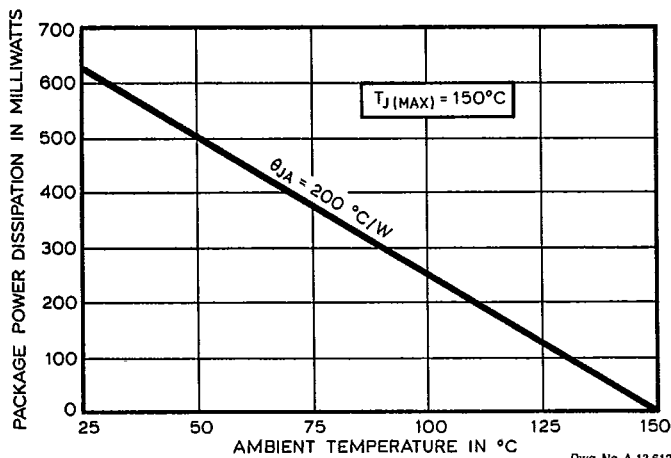
Dwg No A-13.610

DIMENSIONS IN MILLIMETERS

Based on 1" = 25.4 mm



Dwg. No. A-13.611

MAXIMUM ALLOWABLE PACKAGE POWER DISSIPATION
AS A FUNCTION OF AMBIENT TEMPERATURE

Dwg No A-13.612



CG PINOUT

Pin	Terminal
1	Drain
2	Source
3	Gate

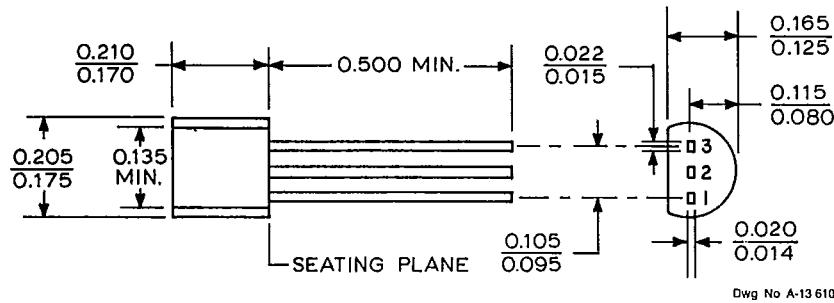
CO PINOUT

Pin	Terminal
1	Source
2	Drain
3	Gate

T-91-20
PACKAGE INFORMATION

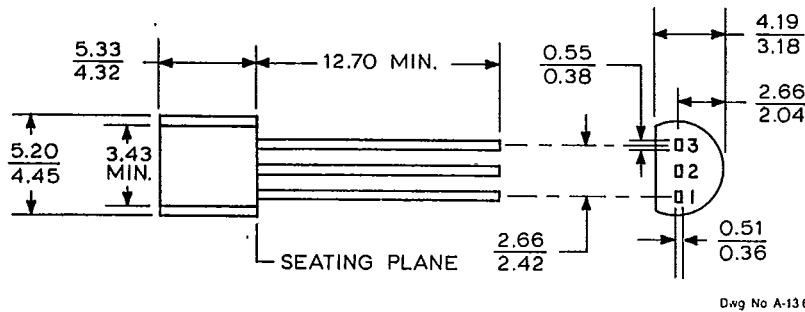
TO-226AA/STYLES CI AND CN

DIMENSIONS IN INCHES

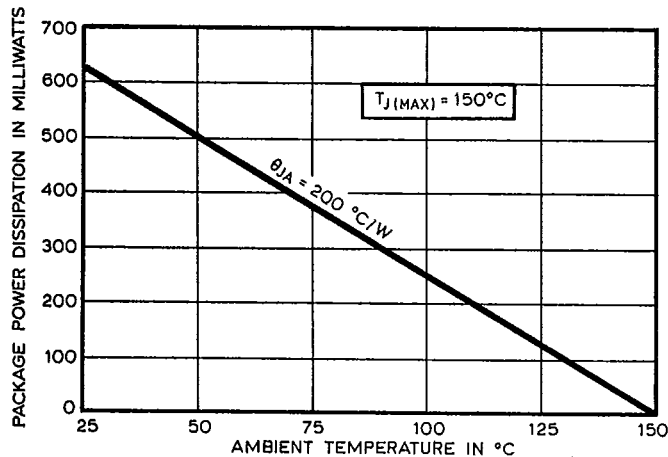


DIMENSIONS IN MILLIMETERS

Based on 1" = 25.4 mm



**MAXIMUM ALLOWABLE PACKAGE POWER DISSIPATION
 AS A FUNCTION OF AMBIENT TEMPERATURE**



CI PINOUT

Pin	Terminal
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