

8514019 SPRAGUE, SEMICONDUCTORS/ICS

93D 03604 D

T-29-25

PLASTIC-CASE JUNCTION FIELD-EFFECT TRANSISTORS

P-Channel JFETs

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

Device Type	$V_{BR}(\text{V}_{GS})$		$I_{SS}$		$V_{GS(\text{on})}$				$I_{DSS}$			$\theta_{fs}$			$C_{iss}^1$		$C_{rss}^1$		$r_{DS} \text{ Max. } (\Omega)$	Process
					Limits		Conditions													
	Min. (V)	@ $I_G$ ( $\mu\text{A}$ )	Max. (nA)	@ $V_{GS}$ (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)		
TP3994	25	1.0	1.0	15	1.0	5.5	-10	-12	-2.0	—	-10	4.0	10	-10	16	-10	4.5	10 <sup>3</sup>	300	PJ99
TP4381	25	1.0	1.0	15	1.0	5.0	-15	-10 <sup>2</sup>	-3.0	-12	-15	2.0	6.0	-15	20	-15	5.0	-15	—	PJ32
TP5018	30	1.0	2.0	15	—	10	-15	-12	-10	—	-20	—	—	—	45	-15	10	12 <sup>3</sup>	75	PJ99
TP5019	30	1.0	2.0	15	—	5.0	-15	-12	-5.0	—	-20	—	—	—	45	-15	10	7.0 <sup>3</sup>	150	PJ99
TP5020	25	1.0	1.0	15	0.3	1.5	-15	-12	-0.3	-1.2	-15	1.0	3.5	-15	25	-15	7.0	-15	—	PJ32
TP5021	25	1.0	1.0	15	0.5	2.5	-15	-12	-1.0	-3.5	-15	1.5	6.0	-15	25	-15	7.0	-15	—	PJ32
TP5033	20	10	10	15	0.3	2.5	-15	-10 <sup>2</sup>	0.3	3.5	-15	1.0	5.0	-10	25	-15	7.0	-15	—	PJ32
TP5114	30	1.0	1.0	20	5.0	10	-15	-1.0	-30	-90	-15	—	—	—	25	-15	7.0	12 <sup>3</sup>	75	PJ99
TP5115	30	1.0	1.0	20	3.0	6.0	-15	-1.0	-16	-60	-15	—	—	—	25	-15	7.0	7.0 <sup>3</sup>	100	PJ99
TP5116	30	1.0	1.0	20	1.0	4.0	-15	-1.0	-5.0	-25	-15	—	—	—	25	-15	7.0	5.0 <sup>3</sup>	150	PJ99
2N5460	40	10	5.0	20	0.75	6.0	-15	-1.0	-1.0	-5.0	-15	1.0	5.0	-15	7.0	-15	3.0	-15	—	PJ32
2N5461	40	10	5.0	20	1.0	7.5	-15	-1.0	-2.0	-9.0	-15	1.5	5.5	-15	7.0	-15	3.0	-15	—	PJ32
2N5462	40	10	5.0	20	1.8	9.0	-15	-1.0	-4.0	-16	-15	2.0	6.0	-15	7.0	-15	3.0	-15	—	PJ32
J174	30	1.0	1.0	20	5.0	10	-15	-10	-20	-135	-15	—	—	—	—	—	—	—	85	PJ99
J175	30	1.0	1.0	20	3.0	6.0	-15	-10	-7.0	-70	-15	—	—	—	—	—	—	—	125	PJ99
J176	30	1.0	1.0	20	1.0	4.0	-15	-10	-2.0	-35	-15	—	—	—	—	—	—	—	250	PJ99
J177	30	1.0	1.0	20	0.8	2.25	-15	-10	-1.5	-20	-15	—	—	—	—	—	—	—	300	PJ99
J270	30	1.0	0.2	20	0.5	2.0	-15	-1.0	-2.0	-15	-15	6.0	15	-15	—	—	—	—	—	PJ99
J271	30	1.0	0.2	20	1.5	4.5	-15	-1.0	-6.0	-50	-15	8.0	18	-15	—	—	—	—	—	PJ99
P1086	30	1.0	2.0	15	—	10	-15	-12	-10	—	-20	—	—	—	45	-15	10	12 <sup>3</sup>	75	PJ99
P1087	30	1.0	2.0	15	—	5.0	-15	-12	-5.0	—	-20	—	—	—	45	-15	10	7.0 <sup>3</sup>	150	PJ99
TPU304	30	1.0	1.0	20	5.0	10	-15	-12	-30	-90	-15	—	—	—	27	-15	7.0	12 <sup>3</sup>	85	PJ99
TPU305	30	1.0	1.0	20	3.0	6.0	-15	-12	-15	-60	-15	—	—	—	27	-15	7.0	7.0 <sup>3</sup>	110	PJ99
TPU306	30	1.0	1.0	20	1.0	4.0	-15	-12	-5.0	-25	-15	—	—	—	27	-15	7	5.0 <sup>3</sup>	175	PJ99

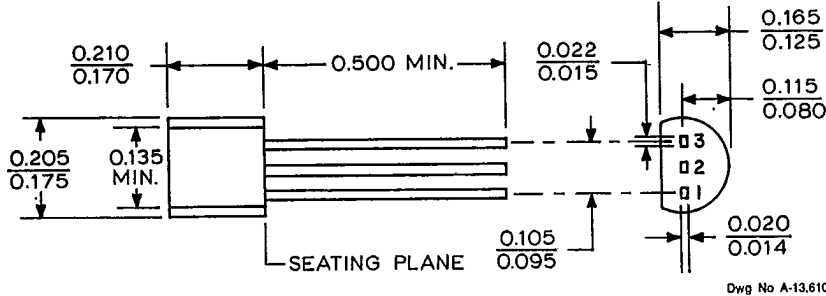
- NOTES:  
 1)  $V_{GS} = 0$  V.  
 2)  $I_D$  in  $\mu\text{A}$ .  
 3)  $V_{DS} = 0$  V,  $V_{GS}$  in volts.  
 4)  $V_{GS} = 1.0$  V.

T-91-20

PACKAGE INFORMATION

TO-226AA/STYLES CG AND CO

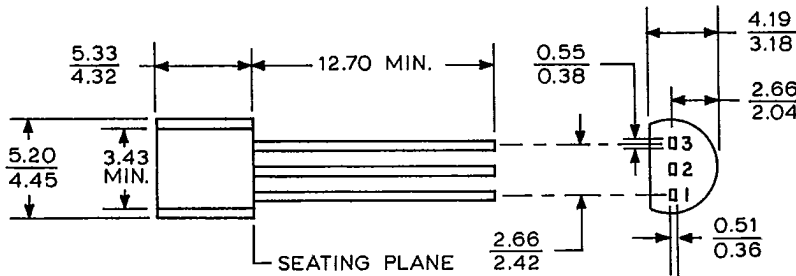
DIMENSIONS IN INCHES



Dwg No A-13.610

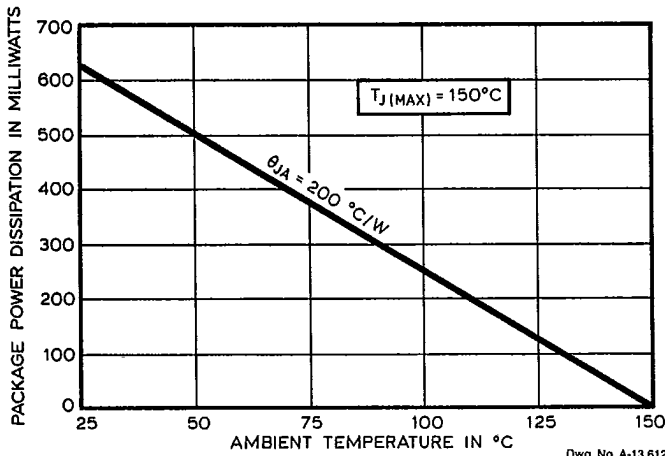
DIMENSIONS IN MILLIMETERS

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

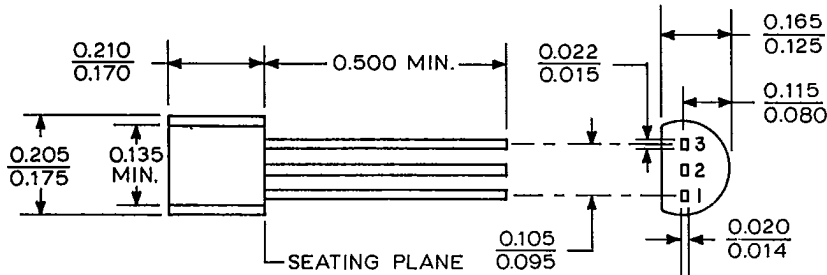
Pin	Terminal
1	Source
2	Drain
3	Gate

T-91-20

PACKAGE INFORMATION

TO-226AA/STYLES CI AND CN

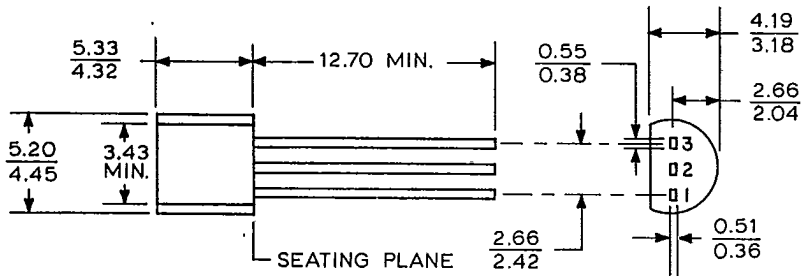
DIMENSIONS IN INCHES



Dwg No A-13610

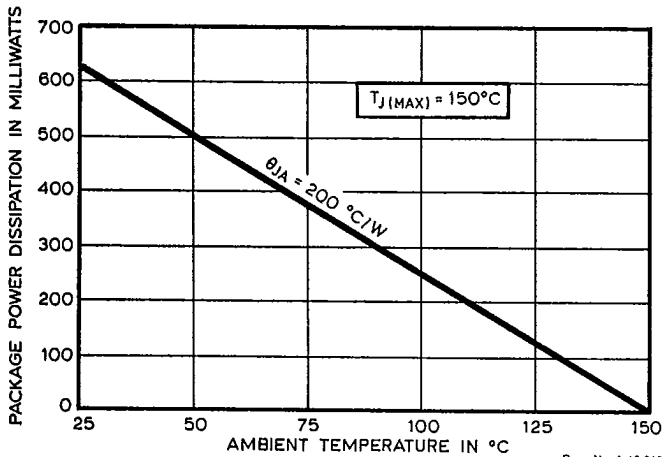
DIMENSIONS IN MILLIMETERS

Based on 1" = 25.4 mm



Dwg No A-13611

MAXIMUM ALLOWABLE PACKAGE POWER DISSIPATION AS A FUNCTION OF AMBIENT TEMPERATURE



Dwg No A-13612



CI PINOUT

Pin	Terminal
1	Drain
2	Gate
3	Source

CN PINOUT

Pin	Terminal
1	Source
2	Gate
3	Drain