

Type	V_{CBO} V Max	V_{EBO} V Max	V_{CE} V Max		I_{CBO} μA Max @ V_{CB} V	h_{FE} Min Max	@ I_C mA	Cob pf Max	fab MHZ Min	Pack Outline	Power Dissipation @ 25°C MW	
2N828A 2N829 2N808 2N960 2N961	15 15 30 15 12	2.5 2.5 2.5 2.5 2.0	7 7		6 6 15 6 6	3.0 3.0 10.0 3.0 3.0	25- 50- 30- 20- 20-	10 10 10 10 10	4.0 4.0 4.0 4.0 4.0	300 300 300 300 300	TO-18' TO-18' TO-18' TO-18' TO-18'	150 150 150 150 150
2N962 2N962 2N963 2N964 2N964	12 12 12 15 15	1.2 1.3 2.0 2.5 2.5	7 7 7 7 7		6 6 6 6 6	3.0 3.0 5.0 3.0 3.0	20- 20- 20- 40- 40-	10 10 10 10 10	4.0 5.0 5.0 4.0 5.0	300 300 300 300 300	TO-18' TO-18' TO-18' TO-18' TO-18'	150 150 300 150 150
2N964A 2N965 2N966 2N967 2N968	15 12 12 12 15	2.5 2.0 1.2 2.0 2.5	7 7 7 7 7		6 6 6 6 6	3.0 3.0 3.0 5.0 3.0	48- 40- 40- 40- 17-	10 10 10 10 10	4.0 4.0 4.0 4.0 8.0	300 300 300 300 300	TO-18' TO-18' TO-18' TO-18' TO-18'	150 150 150 300 150
2N969 2N970 2N971 2N972 2N973	12 12 7 15 12	2.0 1.2 1.2 2.5 2.0			6 6 6 6 6	3.0 3.0 10.0 3.0 3.0	17- 17- 17- 40- 40-	10 10 10 10 10	8.0 8.0 8.0 8.0 8.0	300 300 300 300 300	TO-18' TO-18' TO-18' TO-18' TO-18'	150 150 150 150 150
2N974 2N975 2N985 2N2635 2N3449	12 7 15 30 15	1.2 1.2 3.0 2.5 1.5	7 7 15 6		6 6 5 25 6	3.0 10.0 3.0 5.0 3.0	40- 40- 40- 30- 20-	10 10 10 10 10	8.0 8.0 6.0 5.0 5.0	300 300 300 300 300	TO-18' TO-18' TO-18' TO-18' TO-18'	150 150 300 300 150

¹grounded collector

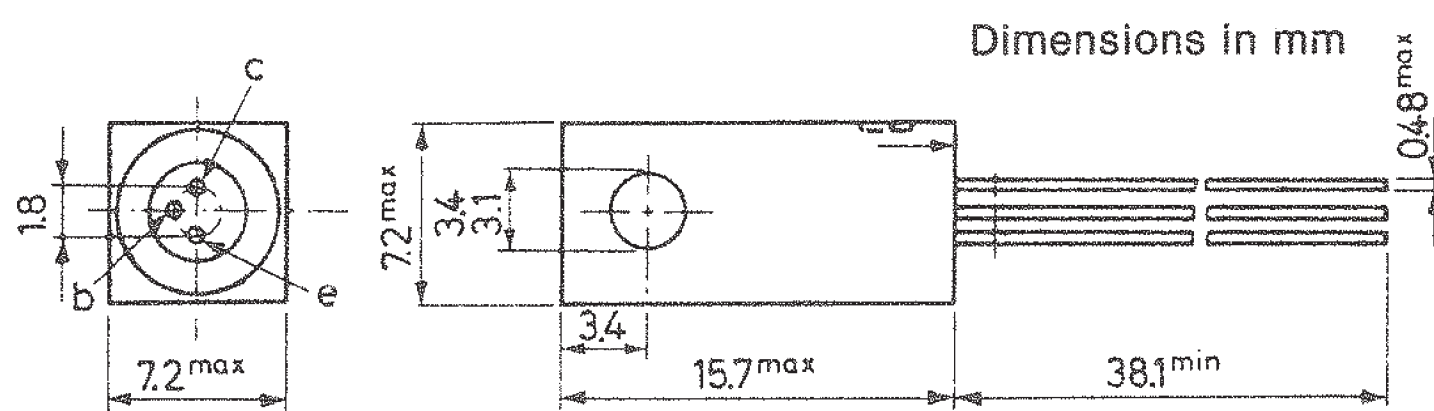
GERMANIUM PNP SMALL SIGNAL TRANSISTORS

Type	V_{CBO} V Max	V_{EBO} V Max	V_{CE} V Max	I_{CBO} μA Max @ V_{CB} V	h_{FE} Min Max	I_C mA @ V_{CB} V	Cob pf Max	fab MHZ Min	Outline	Power Dissipation @ 25°C MW
2N43A 2N44A 2N45 2N186A 2N187A	45 45 25 25 25	5 5 5 5 5	30 30 25 25 25	45 45 45 25 25	16 16 16 16 16	34-65 18-43 18-43 19-31 25-42	20 20 20 20 20	0.5 0.5 0.5 0.8† 1.0†	R-32 R-32 R-32 R-32 R-32	240 240 155 200 200
2N188A 2N190 2N191 2N192 2N241A	25 25 25 25 25	5 5 5 5 5	25 25 25 25 25	25 25 25 25 25	16 16 16 16 16	34-65 34-65 53-121 52-176 50-125	20 20 20 20 20	1.2† 1.0† 1.2† 1.5† 1.3†	R-32 R-32 R-32 R-32 R-32	200 200 200 200 200
2N319 2N320 2N321 2N322 2N323	25 25 25 16 16	3 3 3 10 10	20 20 20 18 18	25 25 25 16 16	16 16 16 16 16	25-42 34-65 53-121 34-65 53-125	20 20 20 20 20	30 30 30 1.0 1.5	TO-5 TO-5 TO-5 TO-5 TO-5	225 225 225 200 200
2N324 2N394 2N394A 2N395 2N396	16 30 30 30 30	10 20 20 20 20	18 15 15 15 20	16 10 12 15 20	16 6 6 6 6	72-198 20-150 30-120 20-150 30-150	20 10 10 10 10	2.0 7.0† 7.0† 6.0† 5.0	TO-5 TO-5 TO-5 TO-5 TO-5	200 150 150 200 200
2N396A 2N397 2N398 2N398A 2N404	30 30 105 105 25	20 20 50 50 12	20 15 105 105 24	20 15 105 105 12	6 6 12 50 5	30-150 40-150 20 20 30	10 10 5 5 12	5.0 10.0 1.0† 1.0† 4.0	TO-5 TO-5 TO-5* TO-5* TO-5	200 200 50 150 150
2N404A 2N413 2N414 2N426 2N427	40 30 30 30 30	25 20 20 20 20	35 18 15 10 15	12 12 12 30 30	5 5 5 25 25	30 32-300 32-300 30-60 40-80	12 10 10 1 1	4.0 5.5 5.5 6.0 5.0	TO-5 TO-5 TO-5 TO-5 TO-5	150 150 150 175 175
2N428 2N461 2N464	30 45 45	20 10 12	12 33 40	30 45 20	25 15 15	60 32-100 14-26	1 20 1	10.0 4.0† 0.7†	TO-5 TO-5 TO-5	175 200 150

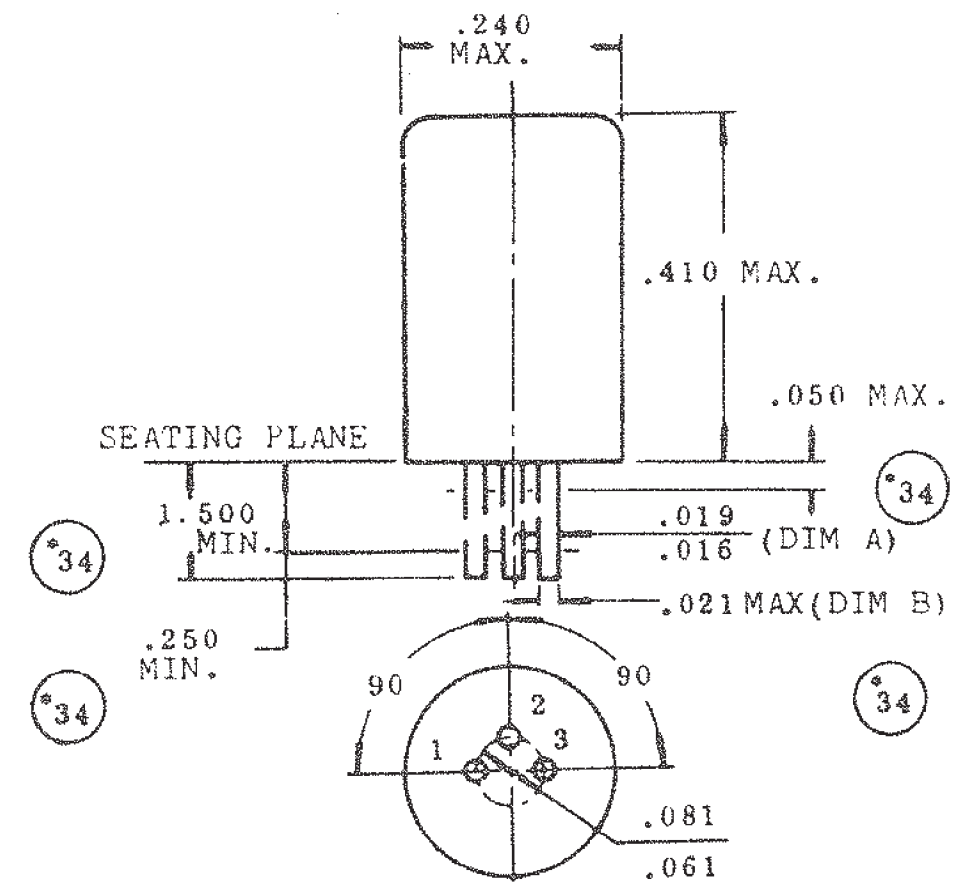
Type	V_{CBO} V Max	V_{EBO} V Max	V_{CE} V Max	I_{CBO} @ V_{CB} V μA Max	h_{FE} Min Max	@ I_C mA	Cob pf Max	fab MHZ Min	Outline*	Power Dissipation @ 25°C MW	
2N465 2N466	45 35	12 12	30 20	20 20	15 15	27-45 56-90	1 1	0.8† 1.0†	TO-5 TO-5	150 150	
2N467 2N508 2N508A 2N522 2N524	35 20 30 15 30	12 10 10 10 15	15 18 25 8 30	20 20 25 15 30	15 6 7 2 10	112-180 99-198 100-200 120 25-42	1 20 20 1 20	1.2† 2.5 2.5 15.0 0.8	TO-5 TO-5 TO-5 TO-5 TO-5	150 200 200 100 225	
2N525 2N526 2N527 2N580 2N581	45 45 45 20 18	15 15 15 12 10	30 30 30 15 15	30 30 30 20 15	10 10 10 5 6	34-65 53-90 72-121 30 20	20 20 20 400 20	40 40 40 30 30	1.0 1.3 1.5 10.0 4.0	TO-5 TO-5 TO-5 TO-5 TO-5	225 225 225 120 80
2N650 2N651 2N652 2N653 2N654	45 45 45 30 30	30 30 30 25 25	30 30 30 25 25	30 30 30 25 25	10 10 10 15 15	33 45 80 20 40	10 10 10 10 10	25 25 25 25 25	0.75 1.0 1.25 1.5† 2.0†	TO-5 TO-5* TO-5 TO-5 TO-5	200 200 200 200 200
2N655 2N658 2N659 2N660 2N661	30 25 25 25 25	25 12 12 12 12	25 16 14 11 9	25 25 25 25 25	15 25 25 25 25	70 25-80 40-110 60-150 75	10 10 10 10 10	25 12 12 12 12	2.5† 2.5 5.0 10.0 15.0	TO-5 TO-5 TO-5 TO-5 TO-5	200 167 167 167 167
2N662 2N1057 2N1097 2N1098 2N1144	25 45 16 18 16	12 5 5 5 5	11 45 18 18 16	25 45 16 16 16	25 16 16 16 16	50 34-90 34-90 25-90 34-90	10 20 20 20 20	12 60 35 35 40	4.0 0.5 1.0 1.0 1.0	TO-5 R-32 TO-5 TO-5 R-32	167 240 200 200 175
2N1145 2N1175 2N1175A 2N1273 2N1274	16 35 35 15 25	10 10 10 10 10	16 25 25 15 15	16 30 30 15 25	16 12 12 14 14	25-90 70-140 70-140 27-165 27-165	20 20 20 50 50	40 40 40 40 40	1.0 1.5 1.5 TO-5 TO-5	R-32 TO-5 TO-5 TO-5 TO-5	175 200 200 250 250
2N1303 2N1305 2N1307 2N1309 2N1370	30 30 30 30 25	25 25 25 25 10	25 20 15 15 25	25 25 25 25 20	6 6 6 6 14	20 40-200 60-300 80 45-165	10 10 10 10 50	20 20 20 20 20	3.0 5.0 10.0 15.0 2.0	TO-5 TO-5 TO-5 TO-5 TO-5	150 150 150 150 225
2N1371 2N1372 2N1373 2N1374 2N1375	45 25 45 25 45	10 15 25 15 25	45 25 45 25 45	20 20 20 20 20	14 7 7 7 7	45-165 27-105 27-105 45-165 45-165	50 50 50 50 50	2.0 2.0 2.0 2.0 2.0	TO-5 TO-5 TO-5 TO-5 TO-5	250 250 250 250 250	
2N1376 2N1377 2N1378 2N1379 2N1380	25 45 12 25 12	15 25 7 15 7	25 45 12 25 12	20 20 12 20 12	7 7 7 7 14	67-165 67-165 85-330 85-330 27-330	60 50 50 50 50	2.0 2.0 2.0 2.0 2.0	TO-5 TO-5 TO-5 TO-5 TO-5	250 250 250 250 250	
2N1381 2N1382 2N1383 2N1404 2N1413	25 25 25 25 35	15 15 15 20 10	25 25 25 25 25	20 20 20 25 30	14 14 14 5 12	27-330 40-165 27-165 100 35-42	50 50 50 24 20	2.0 2.0 2.0 4.0 0.8	TO-5 TO-5 TO-5 TO-5 TO-5	250 250 250 150 200	
2N1414 2N1415 2N1614 2N1924 2N1925	35 35 70 60 60	10 10 12 25 25	25 25 60 40 40	30 30 70 45 45	12 12 23 10 10	34-65 53-90 18-43 34-65 53-90	20 20 20 20 20	40 40 60 30 30	1.0 1.3 0.5 1.0 1.3	TO-5 TO-5 R-32 TO-5 TO-5	200 200 240 225 225
2N1926 2N1997 2N1998 2N1999 2N2000	60 45 35 30 50	25 45 30 20 20	40 40 35 20 15	45 45 35 30 30	10 25 25 25 10	72-121 40-200 70-225 100-350 50-300	20 100 100 100 100	30 20 20 20 35	1.5 3.0 5.6 10.0 2.0	TO-5 TO-5 TO-5 TO-5 TO-5	225 250 250 250 300
2N2001 2N2042 2N2043 2N2374 2N2375	30 105 105 35 35	20 75 75 35 35	15 105 105 35 35	15 105 105 35 35	6 25 25 5 5	100 20-50 400-100 100-300 35-110	100 5 5 100 100	35 25 25 14 20	6.0 0.5 0.75 15.0 TO-5	TO-5 TO-5 TO-5 TO-5 TO-5	300 200 200 250 250
2N2376	35	35	35	35	5	35-110	100	20		TO-5	250

CASE OUTLINE DRAWINGS & DIMENSIONS

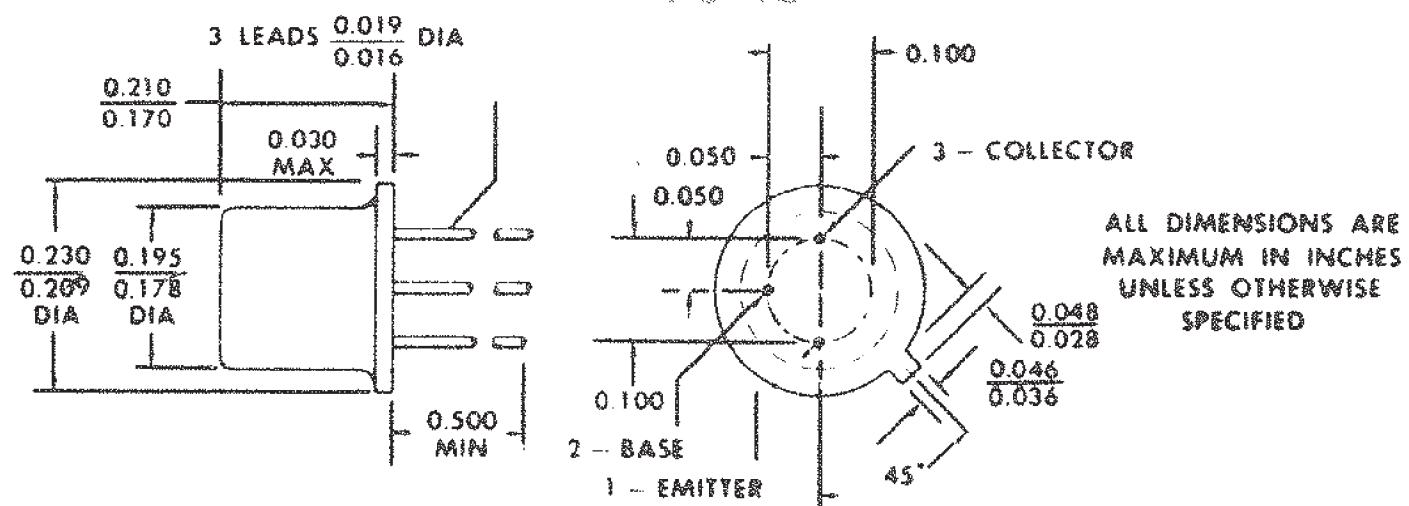
NS257



TO-1



TO-18



THE COLLECTOR IS ELECTRICAL
CONTACT WITH THE CASE.

ALL JEDEC TO-18 DIMENSIONS
AND NOTES ARE APPLICABLE.