

GERMANIUM POWER TRANSISTORS

| Type Number | Case Type | V_{CBO} V | V_{CEO} V | V_{EBO} V | V_{CER} V | V_{CES} V | CURRENT GAIN | | | | SATURATION VOLTAGES | | | | θ_{J-C} °C/W |
|-------------------------------------|-----------|----------------|----------------|----------------|----------------|----------------|--------------|----------|------|---------------------|---------------------|------------------|------------------|------------------|------------------------|
| | | | | | | | Min. | h_{FE} | Max. | $V_{CE} @ I_C$ V | $V_{CE(1)}$ V | $V_{BE(1)}$ V | $I_C @ I_B$ A | $I_C @ I_B$ A | |
| 15 AMP GERMANIUM PNP (Cont.) | | | | | | | | | | | | | | | |
| 2N1553A | TO-3 | 40 | | 20.0 | | 30 | 30 | 60 | 2.0 | 10.0 | .70 | | 10.0 | 1.000 | .80 |
| 2N1554 | TO-3 | 60 | 30 | 30.0 | | 45 | 30 | 60 | 2.0 | 10.0 | .50 | | 10.0 | 1.000 | .80 |
| 2N1554A | TO-3 | 60 | | 30.0 | | 45 | 30 | 60 | 2.0 | 10.0 | .70 | | 10.0 | 1.000 | .80 |
| 2N1555 | TO-3 | 80 | 40 | 40.0 | | 60 | 30 | 60 | 2.0 | 10.0 | .50 | | 10.0 | 1.000 | .80 |
| 2N1555A | TO-3 | 80 | | 40.0 | | 60 | 30 | 60 | 2.0 | 10.0 | .70 | | 10.0 | 1.000 | .80 |
| 2N1556 | TO-3 | 100 | 50 | 50.0 | | 75 | 30 | 60 | 2.0 | 10.0 | .50 | | 10.0 | 1.000 | .80 |
| 2N1556A | TO-3 | 100 | | 50.0 | | 75 | 30 | 60 | 2.0 | 10.0 | .70 | | 10.0 | 1.000 | .80 |
| 2N1557 | TO-3 | 40 | 20 | 20.0 | | 30 | 50 | 100 | 2.0 | 10.0 | .40 | | 10.0 | 1.000 | .80 |
| 2N1557A | TO-3 | 40 | | 20.0 | | 30 | 50 | 100 | 2.0 | 10.0 | .50 | | 10.0 | 1.000 | .80 |
| 2N1558 | TO-3 | 60 | 30 | 30.0 | | 45 | 50 | 100 | 2.0 | 10.0 | .40 | | 10.0 | 1.000 | .80 |
| 2N1558A | TO-3 | 60 | | 30.0 | | 45 | 50 | 100 | 2.0 | 10.0 | .50 | | 10.0 | 1.000 | .80 |
| 2N1559 | TO-3 | 80 | 40 | 40.0 | | 60 | 50 | 100 | 2.0 | 10.0 | .40 | | 10.0 | 1.000 | .80 |
| 2N1559A | TO-3 | 80 | | 40.0 | | 60 | 50 | 100 | 2.0 | 10.0 | .50 | | 10.0 | 1.000 | .80 |
| 2N1560 | TO-3 | 100 | 50 | 50.0 | | 75 | 50 | 100 | 2.0 | 10.0 | .40 | | 10.0 | 1.000 | .80 |
| 2N1560A | TO-3 | 100 | | 50.0 | | 75 | 50 | 100 | 2.0 | 10.0 | .50 | | 10.0 | 1.000 | .80 |
| 2N1970 | TO-36 | 100 | 50 | 40.0 | | | 17 | 40 | 2.0 | 5.0 | 1.00 | | 12.0 | 2.000 | .80 |
| 2N1980 | TO-36 | 50 | 30 | 20.0 | | | 50 | 100 | 2.0 | 5.0 | .50 | | 5.0 | .500 | .50 |
| 2N1981 | TO-36 | 70 | 40 | 20.0 | | | 50 | 100 | 2.0 | 5.0 | .50 | | 5.0 | .500 | .50 |
| 2N1982 | TO-36 | 90 | 50 | 20.0 | | | 50 | 100 | 2.0 | 5.0 | .50 | | 5.0 | .500 | .50 |
| 2N2075 | TO-36 | 80 | 60 | 40.0 | | 80 | 20 | 40 | 2.0 | 5.0 | .70 | | 12.0 | 2.000 | .50 |
| 2N2076 | TO-36 | 70 | 55 | 35.0 | | 70 | 20 | 40 | 2.0 | 5.0 | .70 | | 12.0 | 2.000 | .50 |
| 2N2077 | TO-36 | 50 | 45 | 25.0 | | 50 | 20 | 40 | 2.0 | 5.0 | .90 | | 12.0 | 2.000 | .50 |
| 2N2078 | TO-36 | 40 | 25 | 20.0 | | 40 | 20 | 40 | 2.0 | 5.0 | .90 | | 12.0 | 2.000 | .50 |
| 2N2079A | TO-36 | 80 | 65 | 40.0 | | 80 | 35 | 70 | 2.0 | 5.0 | .70 | | 12.0 | 2.000 | .50 |
| 2N2080 | TO-36 | 70 | 55 | 35.0 | | 70 | 35 | 70 | 2.0 | 5.0 | .70 | | 12.0 | 2.000 | .50 |
| 2N2081 | TO-36 | 50 | 45 | 25.0 | | 50 | 35 | 70 | 2.0 | 5.0 | .90 | | 12.0 | 2.000 | .50 |
| 2N2082 | TO-36 | 40 | 25 | 20.0 | | 40 | 35 | 70 | 2.0 | 5.0 | .90 | | 12.0 | 2.000 | .50 |
| 2N2612 | TO-3 | 65 | 30 | 30.0 | | | 85 | 250 | 2.0 | 10.0 | 1.00 | | 10.0 | .150 | 1.00 |

15 AMP GERMANIUM PNP TETRODES

| | | | | | | | | | | | | | | | |
|------|-------|----|----|--|--|--|----|-----|-----|-----|-----|--|-----|------|-----|
| 3N49 | MT-70 | 60 | 35 | | | | 30 | 120 | 2.0 | 5.0 | .40 | | 5.0 | .500 | .80 |
| 3N50 | MT-70 | 80 | 50 | | | | 20 | 80 | 2.0 | 5.0 | .40 | | 5.0 | .500 | .80 |
| 3N51 | MT-70 | 40 | 25 | | | | 30 | 120 | 2.0 | 5.0 | .40 | | 5.0 | .500 | .80 |
| 3N52 | MT-70 | 60 | 40 | | | | 20 | 80 | 2.0 | 5.0 | .40 | | 5.0 | .500 | .80 |

| Type Number | Case Type | $V_{CEO(max)}$ V | V_{EBO} V | h_{FE} @ I_C/V_{CE} (Min-Max @ A/V) | $V_{CE(1)}$ @ I_C/I_B (V@A/A) | V_{BE} @ I_C/V_{CE} (V@A/V) | I_{CEV} @ V_{CE} (mA@V) | $P_D @$ $T_C = 25^\circ C$ (watts) | θ_{JC} (°C/W) | $T_{J(max)}$ (°C) | f_T (KHz) |
|-------------|-----------|---------------------|----------------|--|---------------------------------------|---------------------------------------|-----------------------------------|--|-------------------------|----------------------|----------------|
|-------------|-----------|---------------------|----------------|--|---------------------------------------|---------------------------------------|-----------------------------------|--|-------------------------|----------------------|----------------|

15 TO 65 AMP GERMANIUM PNP

| | | | | | | | | | | | |
|--------|-------|----|----|------------|---------|----------|------|-----|-----|-----|--|
| 2N2490 | TO-36 | 50 | 40 | 20-40@5/2 | .7@12/2 | .9@5/2 | 3@70 | 170 | 0.5 | 110 | |
| 2N2491 | TO-36 | 40 | 30 | 35-70@5/2 | .7@12/2 | .9@5/2 | 3@60 | 170 | 0.5 | 110 | |
| 2N2492 | TO-36 | 65 | 60 | 25-50@5/2 | .5@12/2 | .8@5/2 | 2@80 | 170 | 0.5 | 110 | |
| 2N1518 | TO-36 | 40 | 30 | 15-60@15/4 | .7@25/4 | 1.5@25/3 | 4@50 | 70 | 0.8 | 95 | |
| 2N1519 | TO-36 | 60 | 30 | 15-60@15/4 | .7@25/4 | 1.5@25/3 | 4@80 | 70 | 0.8 | 95 | |

| Type Number | Case Type | V_{CBO} V | V_{CEO} V | V_{EBO} V | V_{CER} V | V_{CES} V | CURRENT GAIN | | | | SATURATION VOLTAGES | | | | θ_{J-C} °C/W |
|-------------|-----------|----------------|---------------------|------------------|------------------|------------------|------------------|------------------|------------------|--|---------------------|--|--|--|------------------------|
| Min. | h_{FE} | Max. | $V_{CE} @ I_C$ V | $V_{CE(1)}$ V | $V_{BE(1)}$ V | $I_C @ I_B$ A | $I_C @ I_B$ A | $I_C @ I_B$ A | $I_C @ I_B$ A | | | | | | |

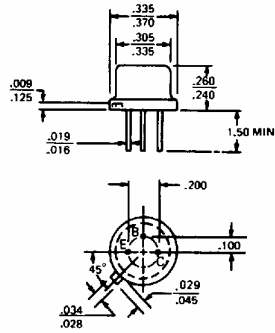
25 AMP GERMANIUM PNP

| | | | | | | | | | | | | | | | |
|--------|-------|----|----|------|--|----|----|-----|------|------|------|--|------|-------|-----|
| 2N511 | TO-41 | 40 | 20 | 30.0 | | 50 | 20 | 60 | 2.0 | 10.0 | .50 | | 10.0 | 1.000 | .50 |
| 2N511A | TO-41 | 60 | 30 | 30.0 | | 60 | 20 | 60 | 2.0 | 10.0 | .50 | | 10.0 | 1.000 | .50 |
| 2N511B | TO-41 | 80 | 40 | 30.0 | | 65 | 20 | 60 | 2.0 | 10.0 | .50 | | 10.0 | 1.000 | .50 |
| 2N512 | TO-41 | 40 | | 30.0 | | 50 | 20 | 60 | 2.0 | 15.0 | 1.00 | | 15.0 | 2.250 | .50 |
| 2N512A | TO-41 | 60 | | 30.0 | | 60 | 20 | 60 | 2.0 | 15.0 | 1.00 | | 15.0 | 2.250 | .50 |
| 2N512B | TO-41 | 80 | | 30.0 | | 65 | 20 | 60 | 2.0 | 15.0 | 1.00 | | 15.0 | 2.250 | .50 |
| 2N513 | TO-41 | 40 | 20 | 30.0 | | 20 | 60 | 2.0 | 20.0 | 20.0 | 1.25 | | 20.0 | 3.000 | .50 |
| 2N513A | TO-41 | 60 | 30 | 30.0 | | 20 | 60 | 2.0 | 20.0 | 20.0 | 1.25 | | 20.0 | 3.000 | .50 |
| 2N513B | TO-41 | 80 | 40 | 30.0 | | 20 | 60 | 2.0 | 20.0 | 20.0 | 1.25 | | 20.0 | 3.000 | .50 |
| 2N514 | TO-41 | 40 | 40 | 30.0 | | 20 | 60 | 2.0 | 25.0 | 25.0 | 1.25 | | 25.0 | 3.750 | .70 |
| 2N514A | TO-41 | 60 | 50 | 30.0 | | 20 | 60 | 2.0 | 25.0 | 25.0 | 1.25 | | 25.0 | 3.750 | .70 |
| 2N514B | TO-41 | 80 | 60 | 30.0 | | 20 | 60 | 2.0 | 25.0 | 25.0 | 1.25 | | 25.0 | 3.750 | .70 |
| 2N575 | MT-7 | 60 | 50 | 28.0 | | 10 | | | 2.0 | 25.0 | .50 | | 10.0 | 2.000 | .40 |
| 2N575A | MT-7 | 80 | 55 | 28.0 | | 10 | | | 2.0 | 25.0 | .50 | | 10.0 | 2.000 | .40 |
| 2N1162 | TO-3 | 50 | | 25.0 | | 35 | 15 | 65 | 1.0 | 25.0 | .80 | | 25.0 | 1.600 | .80 |

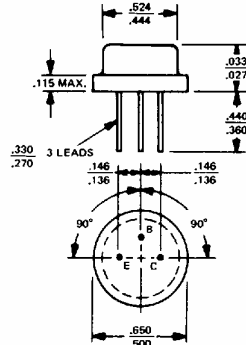
GERMANIUM POWER TRANSISTORS

CASE OUTLINE DRAWINGS & DIMENSIONS

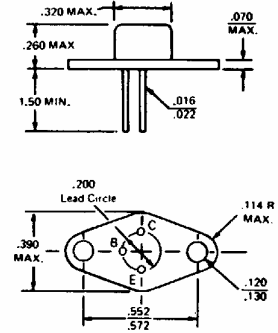
TO-5



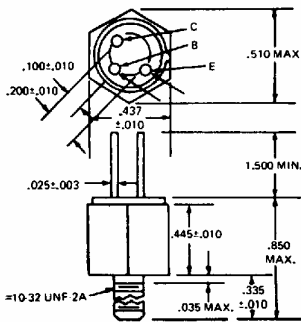
TO-8



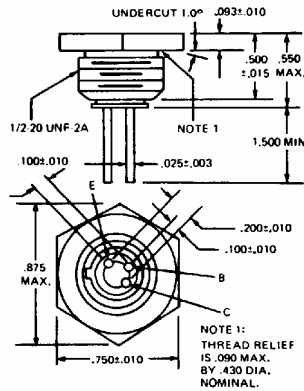
TO-37



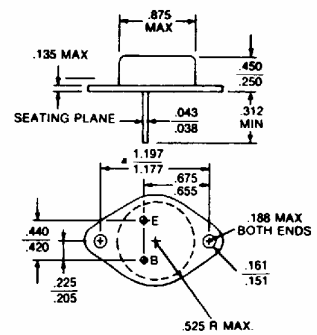
MT-27



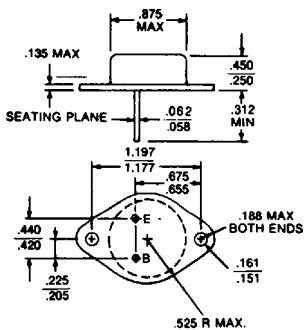
MT-28



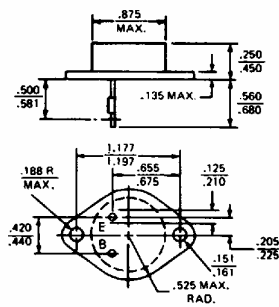
TO-3



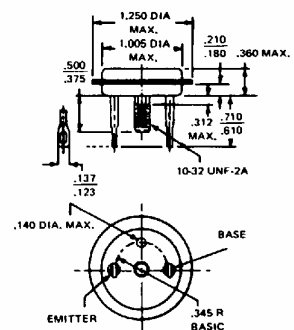
MODIFIED TO-3
(60 mil pins)



TO-41



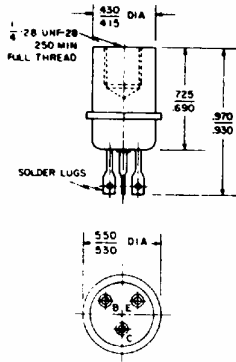
TO-36



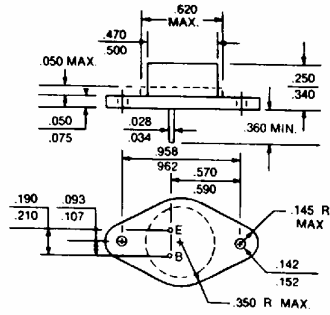
GERMANIUM POWER TRANSISTORS

CASE OUTLINE DRAWINGS & DIMENSIONS

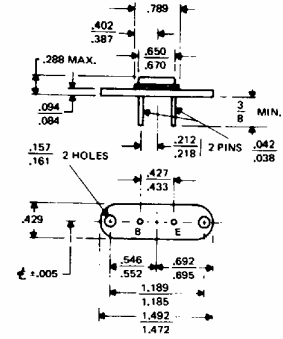
TO-13



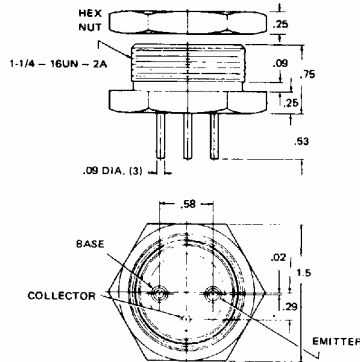
TO-66



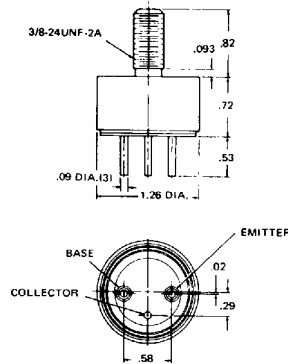
MS-7



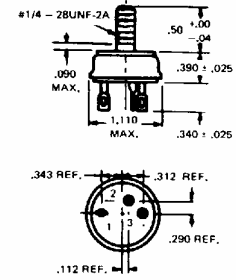
MT-22



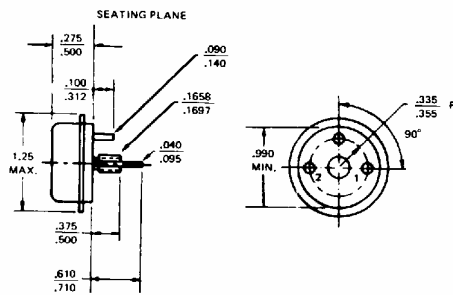
MT-23



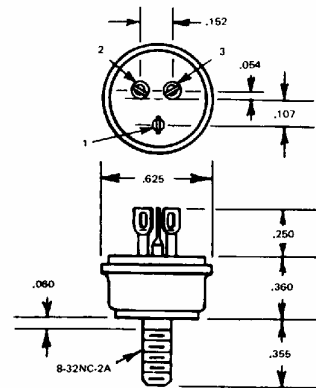
MT-7



TO-68



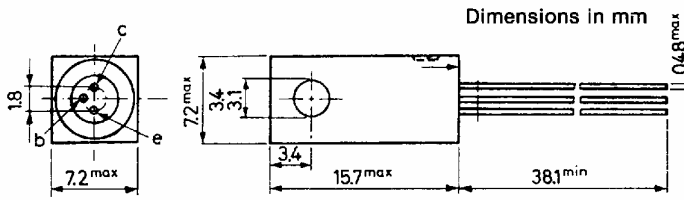
MT-36



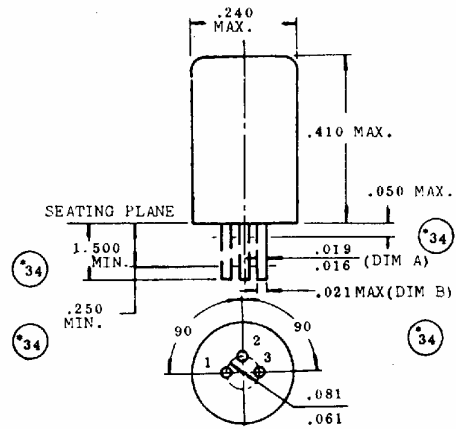
GERMANIUM POWER TRANSISTORS

CASE OUTLINE DRAWINGS & DIMENSIONS

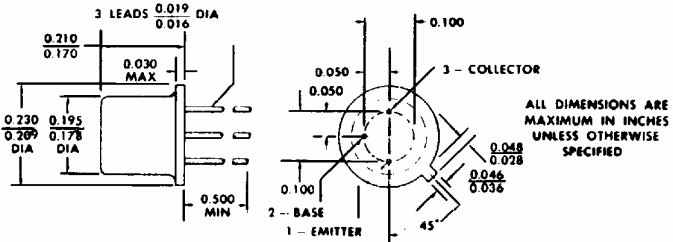
NS257



TO-1



TO-18



THE COLLECTOR IS ELECTRICAL CONTACT WITH THE CASE.

ALL JEDEC TO-18 DIMENSIONS AND NOTES ARE APPLICABLE.



GERMANIUM POWER DEVICES CORP.

300 Brickstone Square · York Street · P.O. Box 3065
 Shawsheen Village Station · Andover, Massachusetts 01810
 Telephone (508) 475-5982 · FAX (508) 470-1512