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**2N4406**
**2N4407**

## PNP SILICON TRANSISTOR

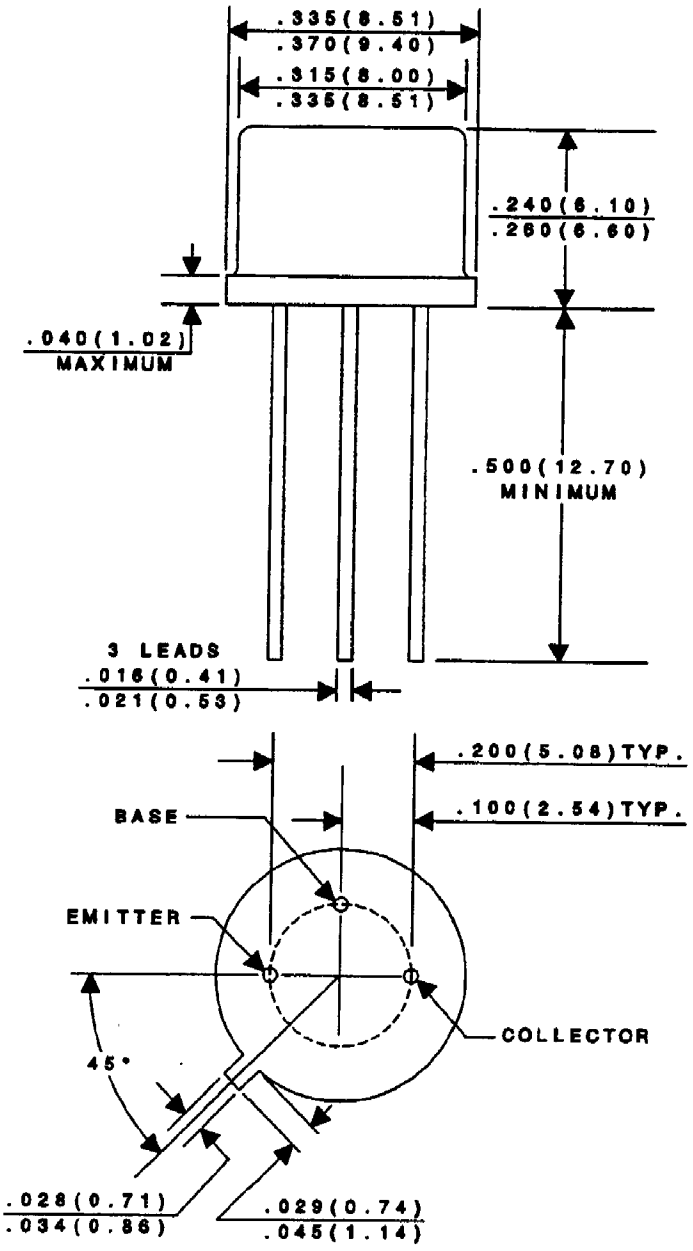
## JEDEC TO-39 CASE

MAXIMUM RATINGS ($T_A = 25°C$)

| | SYMBOL | | UNITS |
|---|---|---|---|
| Collector-Base Voltage | $V_{CBO}$ | 80 | V |
| Collector-Emitter Voltage | $V_{CEO}$ | 80 | V |
| Emitter-Base Voltage | $V_{EBO}$ | 5.0 | V |
| Collector Current | $I_C$ | 2.0 | A |
| Power Dissipation | $P_D$ | 1.25 | W |
| Power Dissipation ($T_C = 25°C$) | $P_D$ | 8.75 | W |
| Operating and Storage Junction Temperature | $T_J, T_{stg}$ | -65 to +200 | °C |
| Thermal Resistance | $\Theta_{JA}$ | 140 | °C/W |
| Thermal Resistance | $\Theta_{JC}$ | 20 | °C/W |

ELECTRICAL CHARACTERISTICS ($T_A = 25°C$ unless otherwise noted)

| SYMBOL | TEST CONDITIONS | 2N4406 MIN | 2N4406 MAX | 2N4407 MIN | 2N4407 MAX | UNITS |
|---|---|---|---|---|---|---|
| $I_{CBO}$ | $V_{CB} = 60V$ | | 25 | | 25 | μA |
| $I_{EBO}$ | $V_{EB} = 3.0V$ | | 25 | | 25 | μA |
| $BV_{CEO}$ | $I_C = 10mA$ | 80 | | 80 | | V |
| $BV_{CBO}$ | $I_C = 10μA$ | 80 | | 80 | | V |
| $BV_{EBO}$ | $I_E = 10μA$ | 5.0 | | 5.0 | | V |
| $V_{CE(SAT)}$ | $I_C = 150mA, I_B = 15mA$ | | 0.2 | | 0.2 | V |
| $V_{CE(SAT)}$ | $I_C = 500mA, I_B = 50mA$ | | 0.4 | | 0.4 | V |
| $V_{CE(SAT)}$ | $I_C = 1.0A, I_B = 100mA$ | | 0.7 | | 0.7 | V |
| $V_{CE(SAT)}$ | $I_C = 1.5A, I_B = 150mA$ | | 1.5 | | 1.5 | V |
| $V_{BE(SAT)}$ | $I_C = 150mA, I_B = 15mA$ | | 0.9 | | 0.9 | V |
| $V_{BE(SAT)}$ | $I_C = 1.0A, I_B = 100mA$ | | 1.3 | | 1.3 | V |
| $V_{BE(SAT)}$ | $I_C = 1.5A, I_B = 150mA$ | | 1.5 | | 1.5 | V |
| $V_{BE(ON)}$ | $V_{CE} = 1.0V, I_C = 500mA$ | | 1.0 | | 1.0 | V |
| $h_{FE}$ | $V_{CE} = 5.0V, I_C = 10mA$ | 30 | | 80 | | |
| $h_{FE}$ | $V_{CE} = 5.0V, I_C = 150mA$ | 30 | | 80 | | |
| $h_{FE}$ | $V_{CE} = 5.0V, I_C = 500mA$ | 30 | 120 | 80 | 240 | |
| $h_{FE}$ | $V_{CE} = 5.0V, I_C = 1.0A$ | 20 | | 30 | | |
| $h_{FE}$ | $V_{CE} = 5.0V, I_C = 1.5A$ | 10 | | 10 | | |
| $f_T$ | $V_{CE} = 20V, I_C = 50mA, f = 100MHz$ | 50 | | 50 | | MHz |
| $C_{cb}$ | $V_{CB} = 10V, I_E = 0, f = 1.0MHz$ | | 50 | | 50 | pF |


.335(8.51)
.370(9.40)
.315(8.00)
.335(8.51)
.240(6.10)
.260(6.60)
.040(1.02)
MAXIMUM
.500(12.70)
MINIMUM
3 LEADS
.016(0.41)
.021(0.53)
.200(5.08)TYP.
.100(2.54)TYP.
BASE
EMITTER
COLLECTOR
45°
.028(0.71)
.034(0.86)
.029(0.74)
.045(1.14)