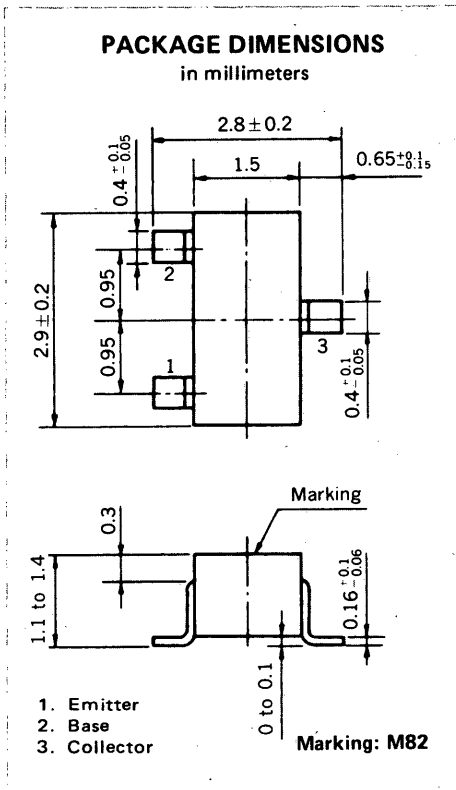
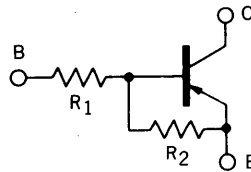


**MEDIUM SPEED SWITCHING  
RESISTOR BUILT-IN TYPE PNP TRANSISTOR  
MINI MOLD**



**FEATURES**

- Resistors Built-in TYPE



$R_1 = 4.7 \text{ k}\Omega$   
 $R_2 = 10 \text{ k}\Omega$

- Complementary to FA1L3N

**ABSOLUTE MAXIMUM RATINGS**

Maximum Voltages and Currents ( $T_a = 25^\circ\text{C}$ )

|                              |           |      |    |
|------------------------------|-----------|------|----|
| Collector to Base Voltage    | $V_{CB0}$ | -60  | V  |
| Collector to Emitter Voltage | $V_{CEO}$ | -50  | V  |
| Emitter to Base Voltage      | $V_{EBO}$ | -5   | V  |
| Collector Current (DC)       | $I_C$     | -100 | mA |
| Collector Current (Pulse)    | $I_C$     | -200 | mA |

Maximum Power Dissipation

|  |       |     |    |
|--|-------|-----|----|
| Total Power Dissipation<br>at $25^\circ\text{C}$ Ambient Temperature | $P_T$ | 200 | mW |
|--|-------|-----|----|

Maximum Temperatures

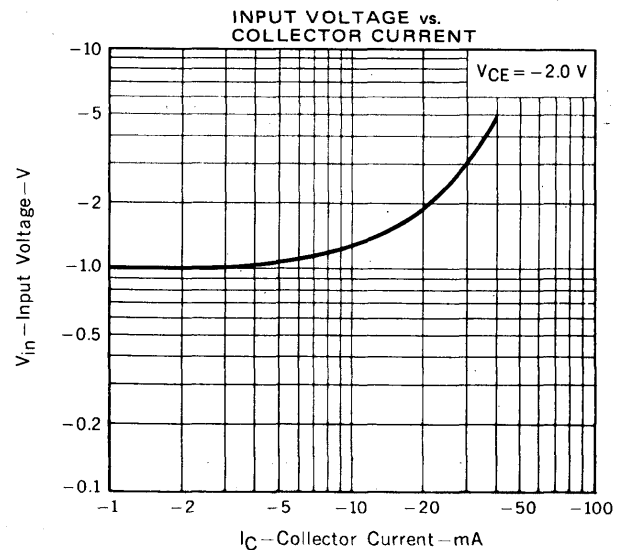
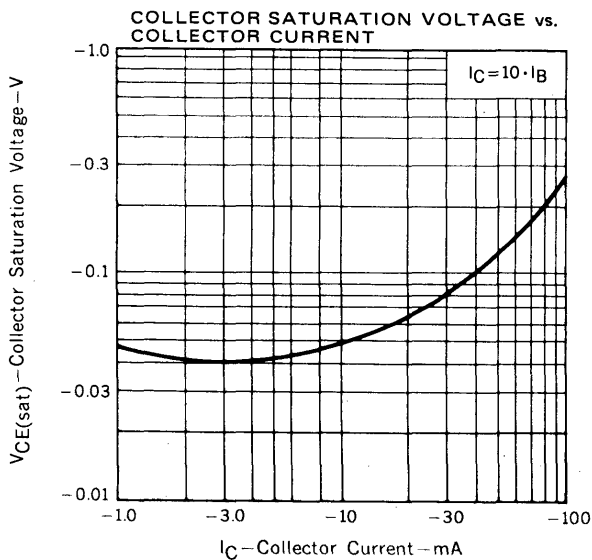
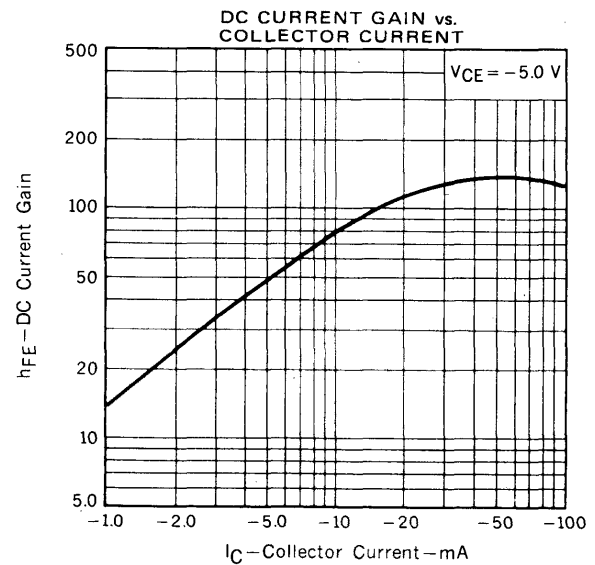
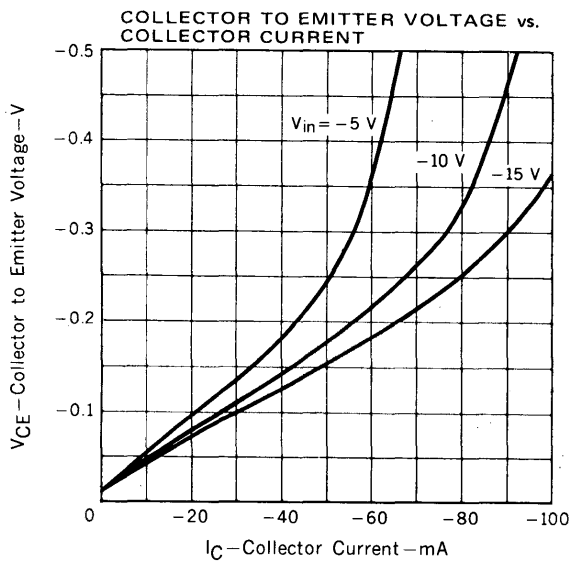
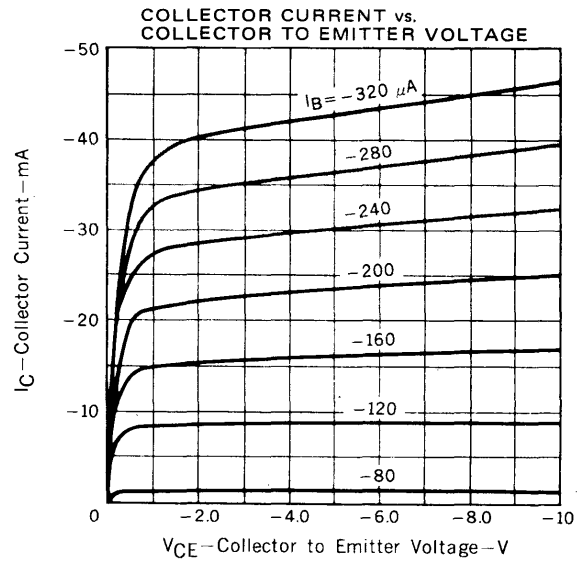
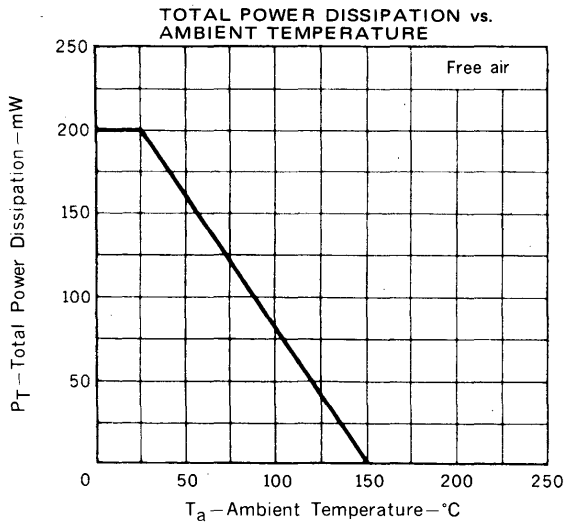
|                           |           |             |                  |
|---------------------------|-----------|-------------|------------------|
| Junction Temperature      | $T_j$     | 150         | $^\circ\text{C}$ |
| Storage Temperature Range | $T_{stg}$ | -55 to +150 | $^\circ\text{C}$ |

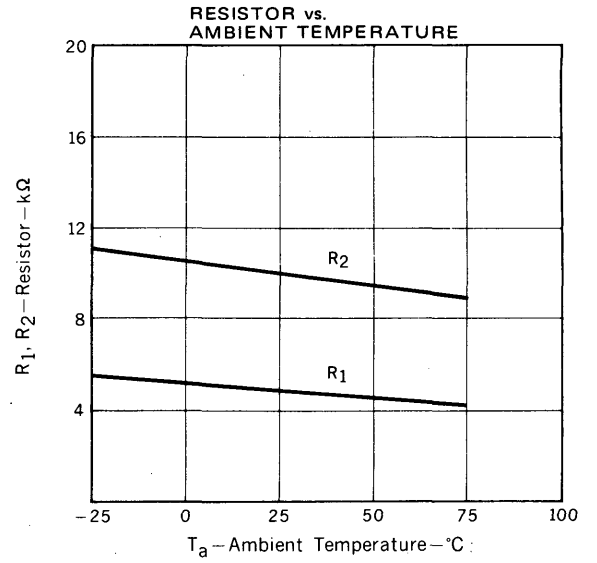
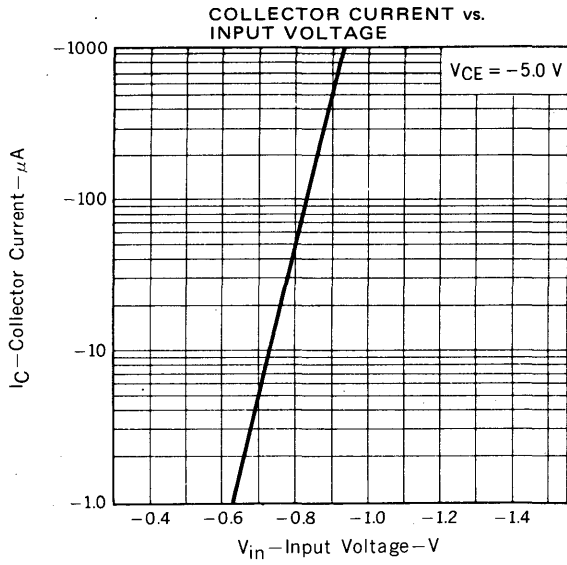
**ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )**

| CHARACTERISTIC               | SYMBOL          | MIN. | TYP.  | MAX. | UNIT             | TEST CONDITIONS  |
|------------------------------|-----------------|------|-------|------|------------------|--|
| Collector Cutoff Current     | $I_{CBO}$       |      |       | -100 | nA               | $V_{CB} = -50 \text{ V}, I_E = 0$  |
| DC Current Gain              | $h_{FE1}^*$     | 35   | 60    | 100  |                  | $V_{CE} = -5.0 \text{ V}, I_C = -5.0 \text{ mA}$   |
| DC Current Gain              | $h_{FE2}^*$     | 80   | 200   |      |                  | $V_{CE} = -5.0 \text{ V}, I_C = -50 \text{ mA}$  |
| Collector Saturation Voltage | $V_{CE(sat)}^*$ |      | -0.04 | -0.2 | V                | $I_C = -5.0 \text{ mA}, I_B = -0.25 \text{ mA}$  |
| Low-Level Input Voltage      | $V_{IL}^*$      |      | -0.9  | -0.6 | V                | $V_{CE} = -5.0 \text{ V}, I_C = -100 \mu\text{A}$  |
| High-Level Input Voltage     | $V_{IH}^*$      | -3.0 | -1.5  |      | V                | $V_{CE} = -0.2 \text{ V}, I_C = -5.0 \text{ mA}$   |
| Input Resistor               | $R_1$           | 3.29 | 4.70  | 6.11 | $\text{k}\Omega$ |  |
| E-B Resistor                 | $R_2$           | 7    | 10    | 13   | $\text{k}\Omega$ |  |
| Turn-on Time                 | $t_{on}$        |      |       | 0.2  | $\mu\text{s}$    | $V_{CC} = -5 \text{ V}, V_{in} = -5 \text{ V}$<br>$R_L = 1 \text{ k}\Omega$<br>$PW = 2 \mu\text{s}, \text{Duty Cycle} \leq 2 \%$ |
| Storage Time                 | $t_{stg}$       |      |       | 5.0  | $\mu\text{s}$    |  |
| Turn-off Time                | $t_{off}$       |      |       | 6.0  | $\mu\text{s}$    |  |

\* Pulsed:  $PW \leq 350 \mu\text{s}, \text{Duty Cycle} \leq 2 \%$

TYPICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )







This datasheet has been download from:

[www.datasheetcatalog.com](http://www.datasheetcatalog.com)

Datasheets for electronics components.