



Micro Commercial Components  
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# 2N3740A

## PNP Silicon Power Transistors

### Features

- Medium-power amplifier applications
- With TO-66 package

### Maximum Ratings

| Symbol    | Rating                      | Rating      | Unit |
|-----------|-----------------------------|-------------|------|
| $V_{CEO}$ | Collector-Emitter Voltage   | 60          | V    |
| $V_{CBO}$ | Collector-Base Voltage      | 60          | V    |
| $V_{EBO}$ | Emitter-Base Voltage        | 7.0         | V    |
| $I_{CP}$  | Peak Collector Current      | 10          | A    |
| $I_C$     | Collector Current           | 4.0         | A    |
| $P_C$     | Collector power dissipation | 25          | W    |
| $T_J$     | Junction Temperature        | -55 to +150 | °C   |
| $T_{STG}$ | Storage Temperature         | -55 to +150 | °C   |

### Electrical Characteristics @ 25°C Unless Otherwise Specified

| Symbol | Parameter | Min | Max | Units |
|--------|-----------|-----|-----|-------|
|--------|-----------|-----|-----|-------|

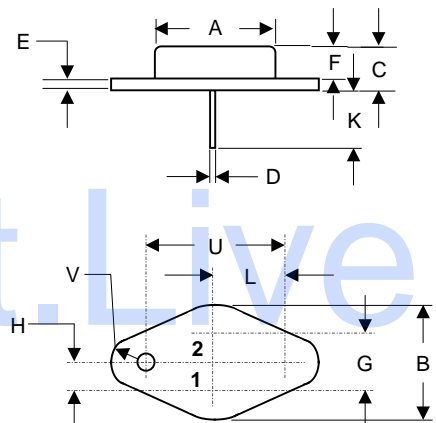
#### OFF CHARACTERISTICS

|               |  |     |     |               |
|---------------|--|-----|-----|---------------|
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage*<br>( $I_C=100\text{mA}$ , $I_B=0$ ) | 60  | --- | Vdc           |
| $I_{CBO}$     | Collector-Base Cutoff Current<br>( $V_{CB}=60\text{Vdc}$ , $I_E=0$ )     | --- | 100 | $\mu\text{A}$ |
| $I_{EBO}$     | Emitter-Base Cutoff Current<br>( $V_{EB}=7.0\text{Vdc}$ , $I_C=0$ )      | --- | 0.5 | $\text{mA}$   |

#### ON CHARACTERISTICS

|               |   |     |     |     |
|---------------|---|-----|-----|-----|
| $h_{FE(1)}$   | Forward Current Transfer ratio<br>( $I_C=100\text{mA}$ , $V_{CE}=1.0\text{Vdc}$ )             | 40  | --- | --- |
| $h_{FE(2)}$   | Forward Current Transfer ratio<br>( $I_C=250\text{mA}$ , $V_{CE}=1.0\text{Vdc}$ )             | 30  | --- | --- |
| $h_{FE(3)}$   | Forward Current Transfer ratio<br>( $I_C=500\text{mA}$ , $V_{CE}=1.0\text{Vdc}$ )             | 20  | --- | --- |
| $h_{FE(4)}$   | Forward Current Transfer ratio<br>( $I_C=1.0\text{A}$ , $V_{CE}=1.0\text{Vdc}$ )              | 10  | --- | --- |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage<br>( $I_C=1.0\text{A}$ , $I_B=125\text{mA}$ )            | --- | 0.6 | Vdc |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage<br>( $I_C=250\text{mA}$ , $V_{CE}=1.0\text{Vdc}$ )            | --- | 1.0 | Vdc |
| $f_T$         | Transition Frequency<br>( $V_{CE}=10\text{Vdc}$ , $I_C=100\text{mA}$ ,<br>$f=1.0\text{MHz}$ ) | 3.0 | --- | MHz |

### TO-66



PIN 1. BASE  
 PIN 2. EMITTER  
 CASE. COLLECTOR

#### DIMENSIONS

| DIM | INCHES |      | MM    |       | NOTE |
|-----|--------|------|-------|-------|------|
|     | MIN    | MAX  | MIN   | MAX   |      |
| A   | .531   | .571 | 13.5  | 14.5  |      |
| B   | ---    | .728 | ---   | 18.5  |      |
| C   | .250   | .340 | 6.35  | 8.63  |      |
| D   | .035   | .043 | 0.90  | 1.10  |      |
| E   | ---    | .122 | ---   | 3.10  |      |
| F   | .050   | .079 | 1.27  | 2.00  |      |
| G   | .190   | .210 | 4.83  | 5.33  |      |
| H   | .122   |      | 3.10  |       |      |
| K   | .360   | .413 | 9.15  | 10.50 |      |
| L   | .540   |      | 13.70 |       |      |
| U   | .898   | .913 | 22.80 | 23.20 |      |
| V   | .150   | .165 | 3.80  | 4.20  |      |