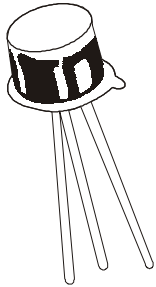


**PNP SILICON PLANAR TRANSISTOR**

**BCX23  
TO-18**



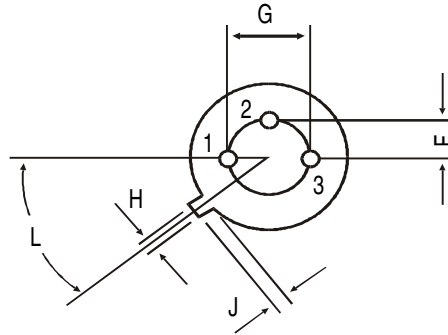
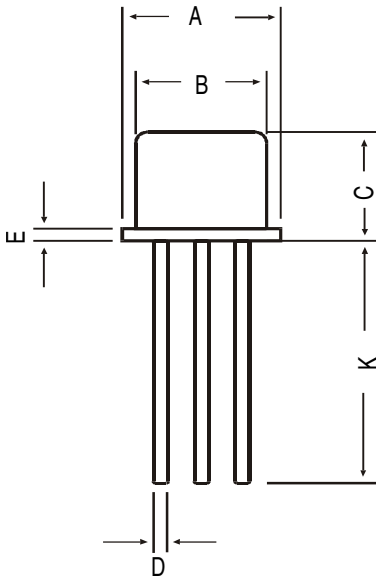
**ABSOLUTE MAXIMUM RATINGS (Ta=25 deg C)**

| DESCRIPTION                                      | SYMBOL    | VALUE       | UNIT  |
|--|-----------|-------------|-------|
| Collector -Emitter Voltage                       | VCES      | 125         | V     |
| Collector -Emitter Voltage                       | VCEO      | 125         | V     |
| Emitter Base Voltage                             | VEBO      | 5.0         | V     |
| Collector Current                                | IC        | 800         | mA    |
| Peak   | ICM       | 1.0         | A     |
| Base Current                                     | IB        | 100         | mA    |
| Power Dissipation @ Ta=25 deg C                  | Ptot      | 450         | mW    |
| @ Tc=45 deg C                                    | Ptot      | 1.55        | W     |
| Operating And Storage Junction Temperature Range | Tj, Tstg  | -65 to +200 | deg C |
| <b>Thermal Resistance</b>                        |           |             |       |
| Junction to Case                                 | Rth (j-c) | 100         | K/W   |
| Junction to Ambient                              | Rth (j-a) | 390         | K/W   |

**ELECTRICAL CHARACTERISTICS (Ta=25 deg C Unless Otherwise Specified)**

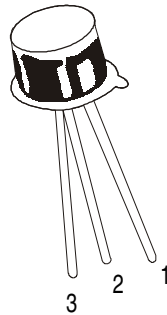
| DESCRIPTION                          | SYMBOL   | TEST CONDITION           | MIN | TYP | MAX  | UNIT |
|--------------------------------------|----------|--------------------------|-----|-----|------|------|
| Collector -Emitter Voltage           | VCEO     | IC=10mA, IB=0            | 125 | -   | -    | V    |
|                                      | VCES     | IC=100uA, VBE=0          | 125 | -   | -    | V    |
| Emitter Base Voltage                 | VEBO     | IE=100uA, IC=0           | 5.0 | -   | -    | V    |
| Collector Emitter Saturation Voltage | VCE(Sat) | IC=300mA, IB=30mA        | -   | -   | 0.90 | V    |
| Base Emitter Saturation Voltage      | VBE(Sat) | IC=300mA, IB=30mA        | -   | -   | 1.4  | V    |
| Collector Cut off Current            | ICES     | VCE=100V, VBE=0          | -   | -   | 100  | nA   |
|                                      |          | Ta=150 deg C             | -   | -   | 10   | uA   |
| Emitter Cut off Current              | IEBO     | VEB=4V, IC=0             | -   | -   | 100  | nA   |
| DC Current Gain                      | hFE      | IC=100mA, VCE=1V         | 63  | -   | -    |      |
| <b>DYNAMIC CHARACTERISTICS</b>       |          |                          |     |     |      |      |
| Transition Frequency                 | ft       | IC=10mA, VCE=5V, f=20MHz | Typ | -   | 100  | MHz  |
| Out-Put Capacitance                  | Cob      | VCB=10V, IE=0, f=1MHz    | Typ | -   | 12   | pF   |

## TO-18 Metal Can Package



All dimensions in mm.

| DIM | MIN    | MAX  |
|-----|--------|------|
| A   | 5.24   | 5.84 |
| B   | 4.52   | 4.97 |
| C   | 4.31   | 5.33 |
| D   | 0.40   | 0.53 |
| E   | —      | 0.76 |
| F   | —      | 1.27 |
| G   | —      | 2.97 |
| H   | 0.91   | 1.17 |
| J   | 0.71   | 1.21 |
| K   | 12.70  | —    |
| L   | 45 DEG |      |



### PIN CONFIGURATION

1. EMITTER
2. BASE
3. COLLECTOR

## Packing Detail

| PACKAGE | STANDARD PACK |                | INNER CARTON BOX |      | OUTER CARTON BOX  |       |        |
|---------|---------------|----------------|------------------|------|-------------------|-------|--------|
|         | Details       | Net Weight/Qty | Size             | Qty  | Size              | Qty   | Gr Wt  |
| TO-18   | 1K/polybag    | 350 gm/1K pcs  | 3" x 7.5" x 7.5" | 5.0K | 17" x 15" x 13.5" | 80.0K | 34 kgs |

## Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished on the CDIL Web Site/CD is believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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