

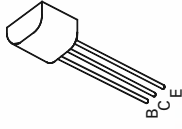
# NPN SILICON PLANAR MEDIUM POWER DARLINGTON TRANSISTOR

## FXT614

ISSUE 1 – FEB 94

### FEATURES

- \* 100 Volt  $V_{CE0}$
  - \* 800 mA continuous current
  - \* Gain of 10K at  $I_C=500mA$
  - \*  $P_{tot} = 1$  Watt
- APPLICATIONS
- \* Lamp, solenoid and relay drivers  
REFER TO BCX38 FOR GRAPHS



E-line  
TO92 Compatible

### ABSOLUTE MAXIMUM RATINGS.

| PARAMETER                                  | SYMBOL         | VALUE       | UNIT        |
|--|----------------|-------------|-------------|
| Collector-Base Voltage                     | $V_{CBO}$      | 120         | V           |
| Collector-Emitter Voltage                  | $V_{CEO}$      | 100         | V           |
| Emitter-Base Voltage                       | $V_{EBO}$      | 10          | V           |
| Continuous Collector Current               | $I_C$          | 800         | mA          |
| Power Dissipation at $T_{amb}=25^{\circ}C$ | $P_{tot}$      | 1           | W           |
| Operating and Storage Temperature Range    | $T_j, T_{stg}$ | -55 to +200 | $^{\circ}C$ |

### ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^{\circ}C$ ).

| PARAMETER                             | SYMBOL         | MIN.          | TYP. | MAX. | UNIT | CONDITIONS.  |
|---------------------------------------|----------------|---------------|------|------|------|--|
| Collector-Base Breakdown Voltage      | $V_{(BR)CBO}$  | 120           |      |      | V    | $I_C=10\mu A, I_E=0$                                 |
| Collector-Emitter Sustaining Voltage  | $V_{CEO(SUS)}$ | 100           |      |      | V    | $I_C=10mA, I_B=0^*$                                  |
| Emitter-Base Breakdown Voltage        | $V_{(BR)EBO}$  | 10            |      |      | V    | $I_E=10\mu A, I_C=0$                                 |
| Collector Cut-Off Current             | $I_{CBO}$      |               |      | 100  | nA   | $V_{CB}=60V, I_E=0$                                  |
| Emitter Cut-Off Current               | $I_{EBO}$      |               |      | 100  | nA   | $V_{EB}=8V, I_C=0$                                   |
| Collector-Emitter Saturation Voltage  | $V_{CE(sat)}$  |               |      | 1.25 | V    | $I_C=800mA, I_B=8mA^*$                               |
| Base-Emitter Turn-On Voltage          | $V_{BE(on)}$   |               |      | 1.8  | V    | $I_C=800mA, V_{CE}=5V^*$                             |
| Static Forward Current Transfer Ratio | $h_{FE}$       | 5000<br>10000 |      |      |      | $I_C=100mA, V_{CE}=5V^*$<br>$I_C=500mA, V_{CE}=5V^*$ |

\*Measured under pulsed conditions. Pulse Width=300 $\mu s$ . Duty cycle  $\leq 2\%$

查询FXT614供应商

捷多邦, 专业PCB打样工厂, 24小时加急出货