

PNP SILICON PLANAR MEDIUM POWER DARLINGTON TRANSISTOR

ZTX712

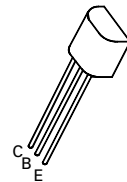
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FEATURES

- * 60 Volt V_{CE0}
- * 0.8 Amp continuous current
- * Gain of 10K at $I_C=0.5$ Amp

APPLICATIONS

- * Lamp, solenoid and relay drivers



E-Line
TO92 Compatible

ABSOLUTE MAXIMUM RATINGS.

| PARAMETER | SYMBOL | VALUE | UNIT |
|--|----------------|-------------|---------------------------|
| Collector-Base Voltage | V_{CBO} | -80 | V |
| Collector-Emitter Voltage | V_{CEO} | -60 | V |
| Emitter-Base Voltage | V_{EBO} | -10 | V |
| Peak Pulse Current | I_{CM} | -2 | A |
| Continuous Collector Current | I_C | -800 | mA |
| Power Dissipation at $T_{amb} = 25^\circ\text{C}$ derate above 25°C | P_{tot} | 1 5.7 | W mW/ $^\circ\text{C}$ |
| Operating and Storage Temperature Range | $T_j; T_{stg}$ | -55 to +200 | $^\circ\text{C}$ |

ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^\circ\text{C}$ unless otherwise stated).

| PARAMETER | SYMBOL | MIN. | MAX. | UNIT | CONDITIONS. |
|---------------------------------------|----------------|-----------|-------|------|--|
| Collector-Base Breakdown Voltage | $V_{(BR)CBO}$ | -80 | | V | $I_C = -10\mu\text{A}$ |
| Collector-Emitter Breakdown Voltage | $V_{CEO(SUS)}$ | -60 | | V | $I_C = -10\text{mA}^*$ |
| Emitter-Base Breakdown Voltage | $V_{(BR)EBO}$ | -10 | | V | $I_E = -10\mu\text{A}$ |
| Collector Cut-Off Current | I_{CBO} | | -100 | nA | $V_{CB} = -60\text{V}, I_E = 0$ |
| Emitter Cut-Off Current | I_{EBO} | | -100 | nA | $V_{EB} = -8\text{V}, I_C = 0$ |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | | -1.25 | V | $I_C = -800\text{mA}, I_B = -8\text{mA}^*$ |
| Base-Emitter Turn-On Voltage | $V_{BE(on)}$ | | -1.8 | V | $I_C = -800\text{mA}, V_{CE} = -5\text{V}^*$ |
| Static Forward Current Transfer Ratio | h_{FE} | 5K 10K | | | $I_C = -100\text{mA}, V_{CE} = -5\text{V}^*$ $I_C = -500\text{mA}, V_{CE} = -5\text{V}^*$ |

*Measured under pulsed conditions. Pulse width=300 μs . Duty cycle $\leq 2\%$