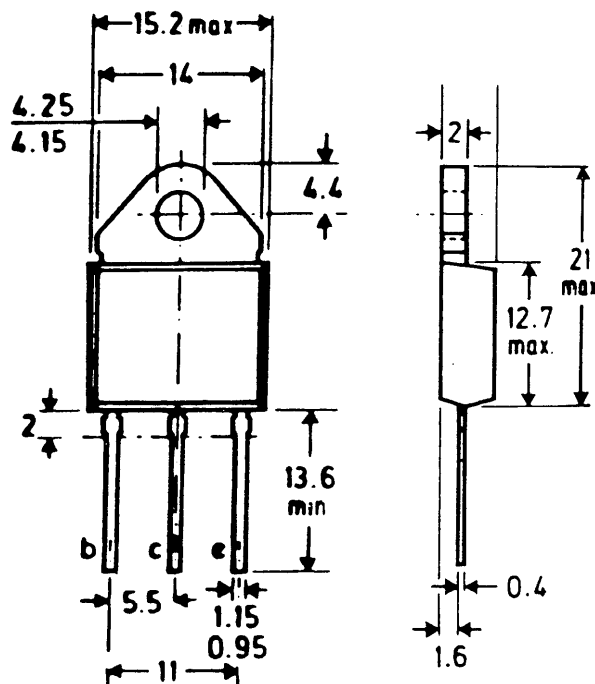


BUP 35

SILICON NPN EPITAXIAL PLANAR

MECHANICAL DATA

Dimensions in mm



SOT 93

FEATURES

- HIGH BREAKDOWN VOLTAGE
- WIDE AREA OF SECONDARY BREAKDOWN
- VERY FAST SWITCHING
- HIGH RELIABILITY

ABSOLUTE MAXIMUM RATINGS

| | | |
|-----------|---|--------------|
| V_{CBO} | Collector-base voltage ($I_E = 0$) | 1100V |
| V_{CEO} | Collector-emitter voltage ($I_B = 0$) | 800V |
| V_{EBO} | Emitter-base voltage ($I_C = 0$) | 6V |
| I_C | Collector current | 10A |
| P_{tot} | Total power dissipation at $T_{CASE} \leq 25^\circ C$ | 80W |
| T_{stg} | Storage temperature | -55 to 150°C |
| T_J | Junction temperature | 150°C |

ELECTRICAL CHARACTERISTICS ($T_{CASE} = 25^{\circ}C$ unless otherwise specified)

| Parameter | Test Conditions | Min. Typ. Max | Unit |
|---|--|---------------|---------|
| I_{CBO} Collector cutoff current ($I_E = 0$) | $V_{CB} = 800V$ | 10 | μA |
| I_{EBO} Emitter cutoff current ($I_C = 0$) | $V_{EB} = 4V$ | 10 | μA |
| $V_{CE(sat)}^*$ Collector-emitter saturation voltage | $I_C = 1.5A$ $I_B = 0.3A$ | 2 | V |
| $V_{BE(sat)}^*$ Base emitter voltage | $I_C = 1.5A$ $I_B = 0.3A$ | 1.5 | V |
| h_{FE1}^* h_{FE2}^* DC Current gain | $I_C = 0.1A$ $V_{CE} = 2V$ $I_C = 1A$ $V_{CE} = 5V$ | 10 15 | — — |
| f_T Transition frequency | $I_C = 0.1A$ $V_{CE} = 5V$ | 15 | MHz |
| I_{SB} Second Breakdown Collector current | $V_{CE} = 200V$ $t = 1 \text{ m sec}$ | 1 | A |

* Pulsed: pulse duration = $300\mu s$, duty cycle = 1.5%

