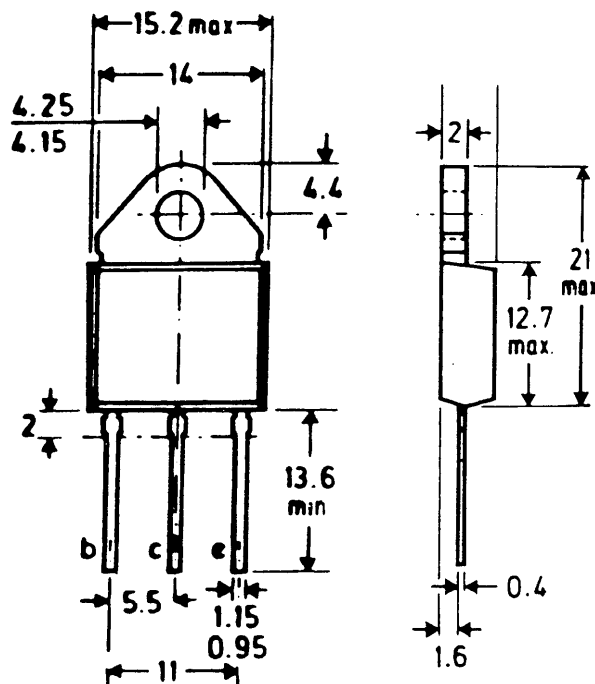


**BUP 35**

## SILICON NPN EPITAXIAL PLANAR

### MECHANICAL DATA

Dimensions in mm



### FEATURES

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

**SOT 93**

### 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	$\mu A$
$I_{EBO}$ Emitter cutoff current ( $I_C = 0$ )	$V_{EB} = 4V$	10	$\mu A$
$V_{CE(sat)}^*$ 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%

