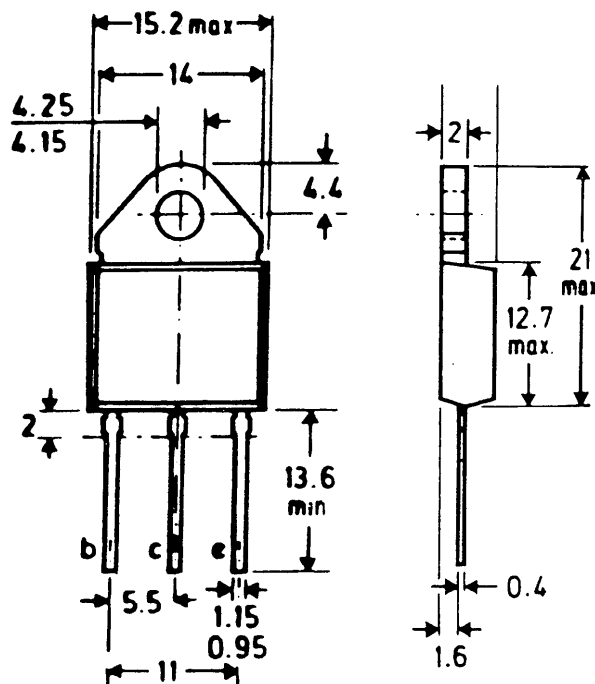


BUP 35

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

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

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

