



SEMELAB

BUP 40

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NEW PRODUCT

BUP 40

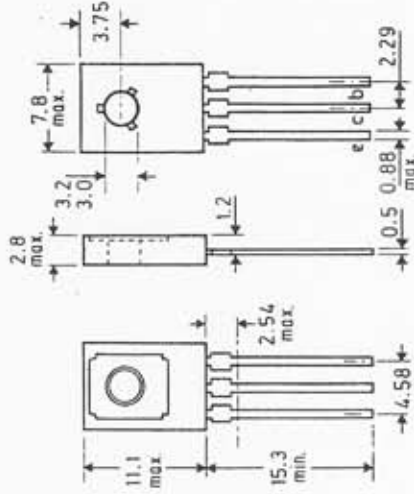
**SILICON PNP
EPITAXIAL PLANAR**

FEATURES

- VERY LOW $V_{CE(sat)}$
- HIGH GAIN AT HIGH CURRENT
- VERY FAST SWITCHING
- NPN COMPLEMENT BUP 41

MECHANICAL DATA

Dimensions in mm



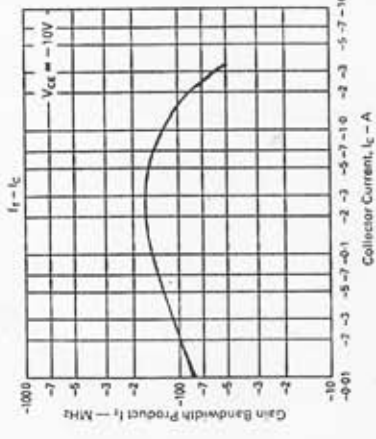
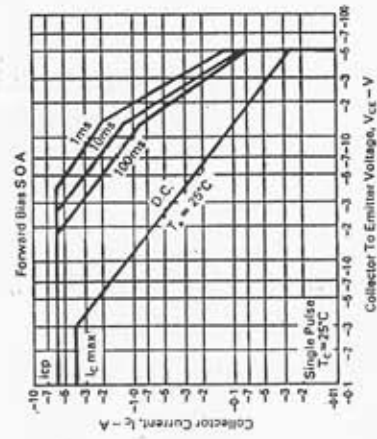
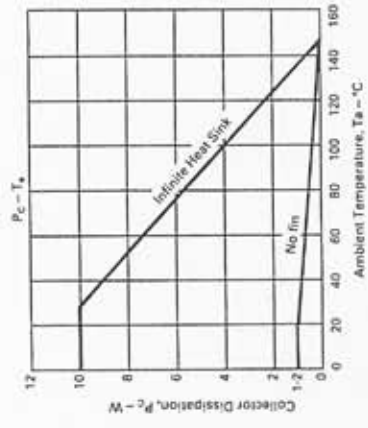
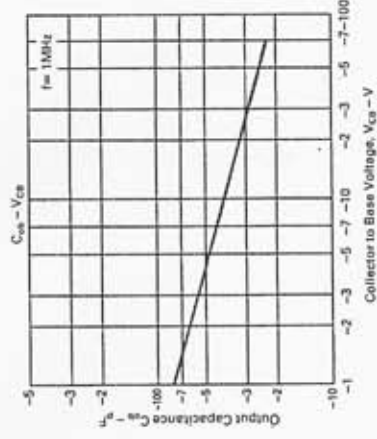
TO 126

ABSOLUTE MAXIMUM RATINGS

V_{CEO}	Collector-base voltage ($I_E = 0$)	-60V
V_{CE0}	Collector-emitter voltage ($I_B = 0$)	-50V
V_{EBO}	Emitter-base voltage ($I_C = 0$)	-6V
I_C	Collector current	-6A
P_{tot}	Total power dissipation at $T_{case} \leq 25^\circ C$	-10W
T_{stg}	Storage temperature	-55 to 150°C
T_J	Junction temperature	150°C

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TENTATIVE 5/90



SEMELAB LTD., COVENTRY ROAD, LUTTERWORTH, LEICS. LE17 4JB

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

Parameter	Test Conditions	Min. Typ. Max	Unit
I_{CBO} Collector cutoff current ($I_E = 0$)	$V_{CB} = -40V$	-1	μA
I_{EBO} Emitter cutoff current ($I_C = 0$)	$V_{EB} = -4V$	-1	μA
$V_{CE(sat)}$ * Collector-emitter saturation voltage	$I_C = -3A$ $I_B = -0.1A$	-1.1	V
$V_{BE(sat)}$ * Base emitter voltage	$I_C = -3A$ $I_B = -0.1A$	-1.4	V
h_{FE1} * h_{FE2} * DC Current gain	$I_C = -1A$ $V_{CE} = -2V$ $I_C = -5A$ $V_{CE} = -5V$	100 200 500 40	— —
f_T Transition frequency	$I_C = -1A$ $V_{CE} = -5V$	150	MHz
C_{D30} Collector base capacitance	$V_{CB} = -10V$ $f = 1MHz$	40	pf
I_{SB} Second Breakdown Collector current	$V_{CE} = -18V$ $t = 1$ m sec	-1	A

* Pulsed: pulse duration = 300 μs , duty cycle = 1.5%

