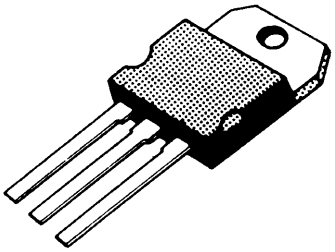
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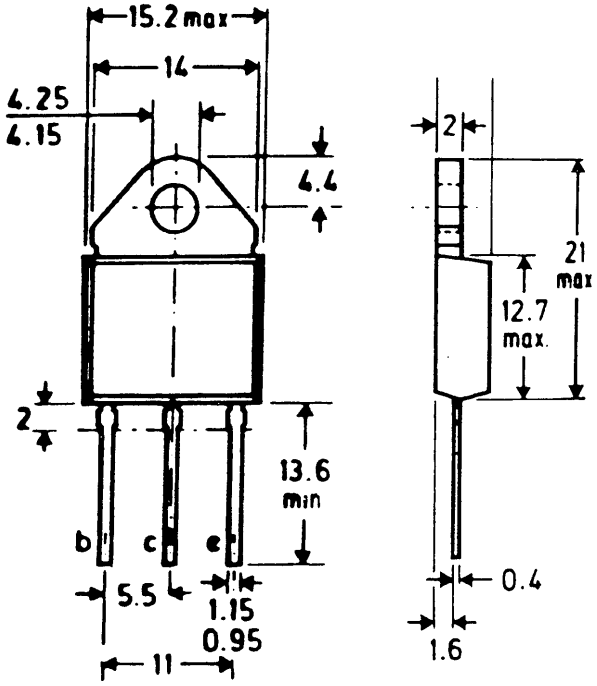


BUP 35

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 $T_{CASE} \leq 25°C$	80W
T_{stg}	Storage temperature	−55 to 150°C
T_J	Junction temperature	150°C

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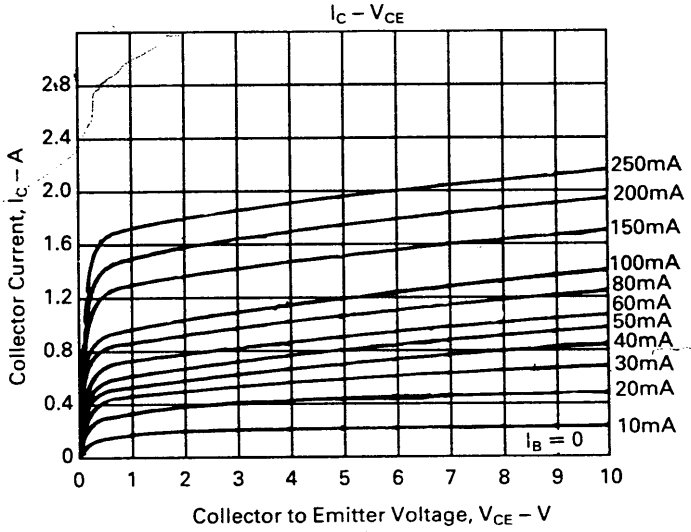
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ELECTRICAL CHARACTERISTICS (T_{CASE} = 25°C unless otherwise specified)

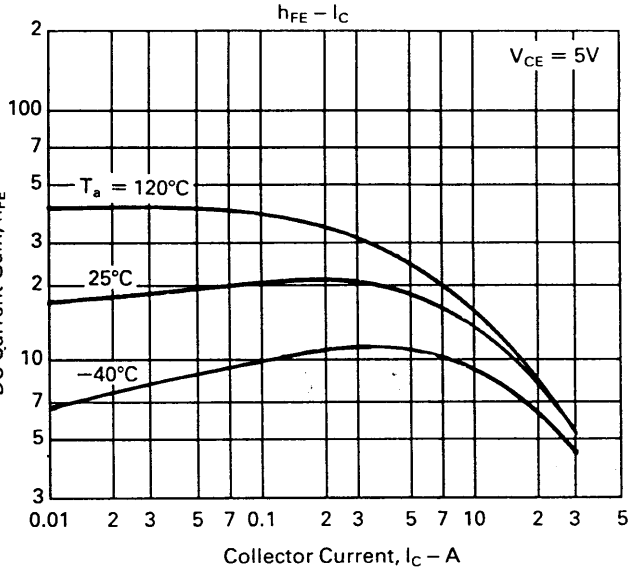
Parameter		Test Conditions		Min. Typ. Max	Unit
I_{CBO}	Collector cutoff current ($I_E = 0$)	$V_{CB} = 800V$		10	μA
I_{EBO}	Emitter cutoff current ($I_C = 0$)	$V_{EB} = 4V$		10	μA
$V_{CE(sat)}$*	Collector-emitter saturation voltage	$I_C = 1{\cdot}5A$	$I_B = 0{\cdot}3A$	2	V
$V_{BE(sat)}$*	Base emitter voltage	$I_C = 1{\cdot}5A$	$I_B = 0{\cdot}3A$	1·5	V
h_{FE1}* h_{FE2}*	DC Current gain	$I_C = 0{\cdot}1A$ $I_C = 1A$	$V_{CE} = 2V$ $V_{CE} = 5V$	10 15	— —
f_T	Transition frequency	$I_C = 0{\cdot}1A$	$V_{CE} = 5V$	15	MHz
I_{SB}	Second Breakdown Collector current	$V_{CE} = 200V$	t = 1 m sec	1	A

* Pulsed: pulse duration = 300μs, duty cycle = 1·5%

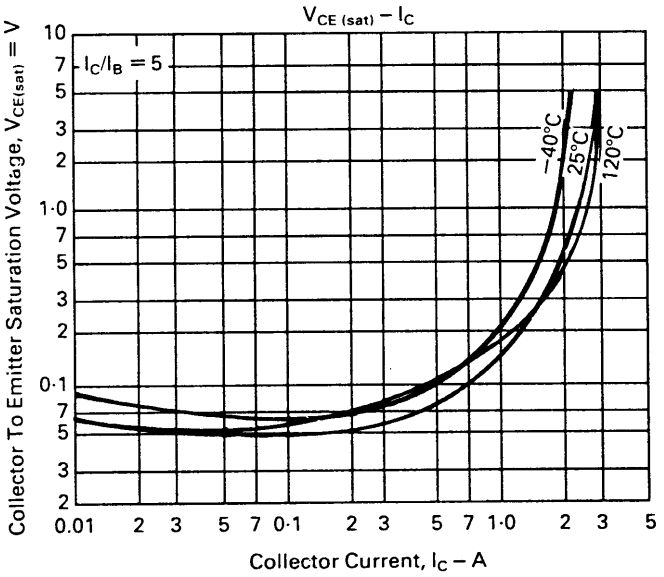
$I_C - V_{CE}$



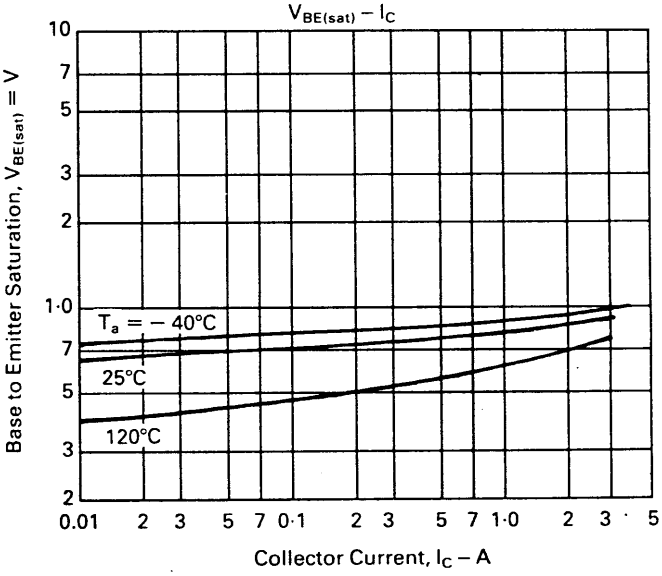
$h_{FE} - I_C$



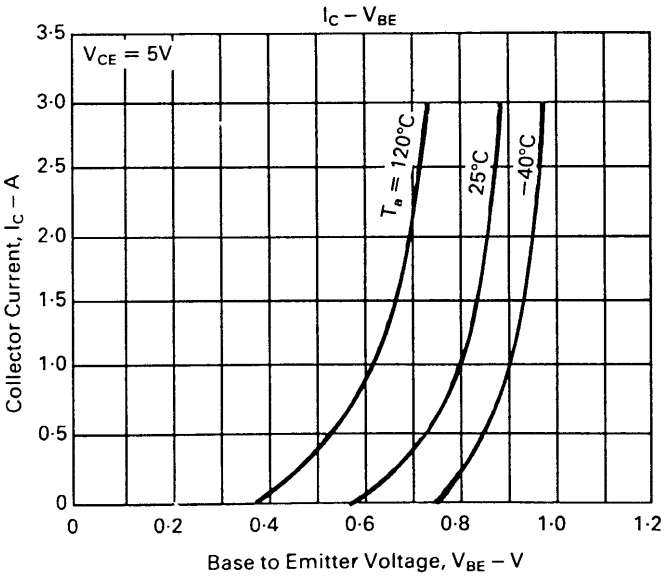
$V_{CE\,(sat)} - I_C$



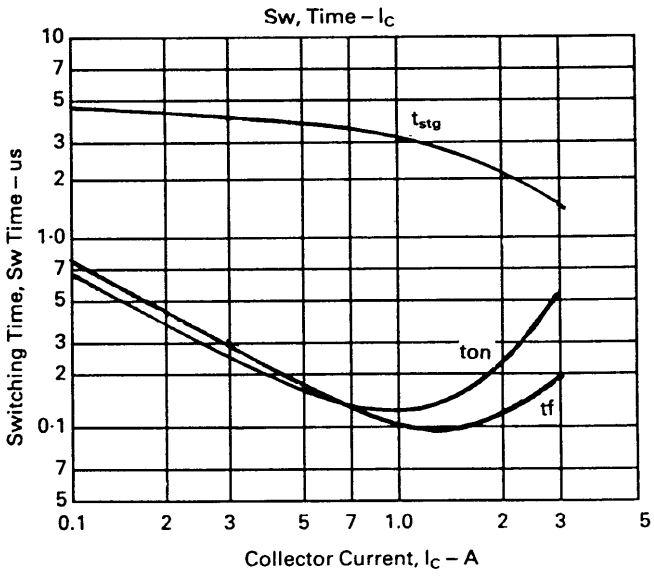
$V_{BE(sat)} - I_C$



$I_C - V_{BE}$



Sw, Time – I_C



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