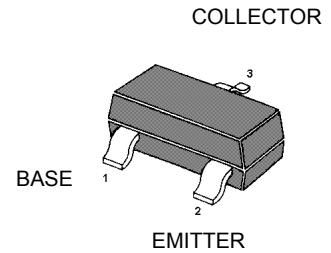


TRANSISTOR (PNP)

FEATURES

- Ideally suited for automatic insertion
- epitaxial planar die construction
- complementary NPN



Marking: 5B

MAXIMUM RATINGS ($T_A=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-45	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-0.5	A
P_C	Collector Power Dissipation	0.3	W
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55-150	$^\circ\text{C}$

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

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	V_{CBO}	$I_C = -10\mu\text{A}$, $I_E = 0$	-50		V
Collector-emitter breakdown voltage	V_{CEO}	$I_C = -10\text{mA}$, $I_B = 0$	-45		V
Emitter-base breakdown voltage	V_{EBO}	$I_E = -1\mu\text{A}$, $I_C = 0$	-5		V
Collector cut-off current	I_{CBO}	$V_{CB} = -45\text{V}$, $I_E = 0$		-0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE} = -40\text{V}$, $I_B = 0$		-0.2	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4\text{V}$, $I_C = 0$		-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -1\text{V}$, $I_C = -100\text{mA}$	160	400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}$, $I_B = -50\text{mA}$		-0.7	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500\text{mA}$, $I_B = -50\text{mA}$		-1.2	V
Transition frequency	f_T	$V_{CE} = -5\text{V}$, $I_C = -10\text{mA}$ $f = 100\text{MHz}$	100		MHz

Typical Characteristics

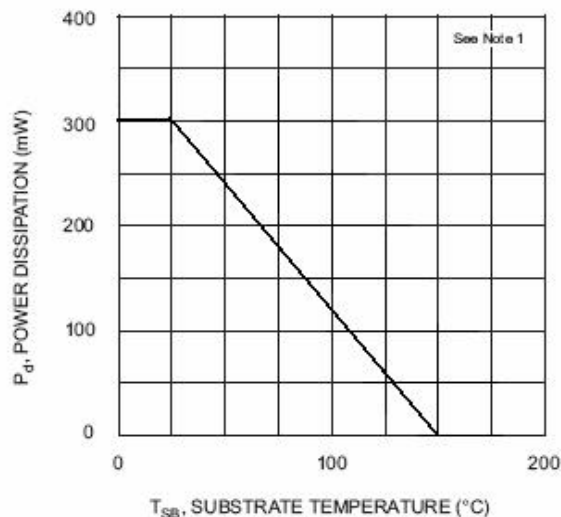


Fig. 1, Power Derating Curve

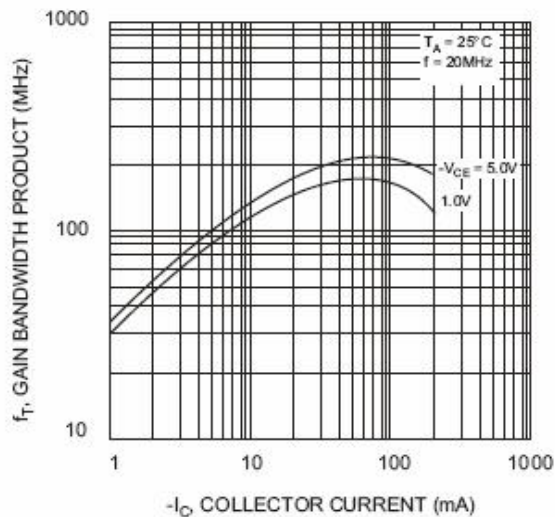


Fig. 2, Gain-Bandwidth Product vs Collector Current

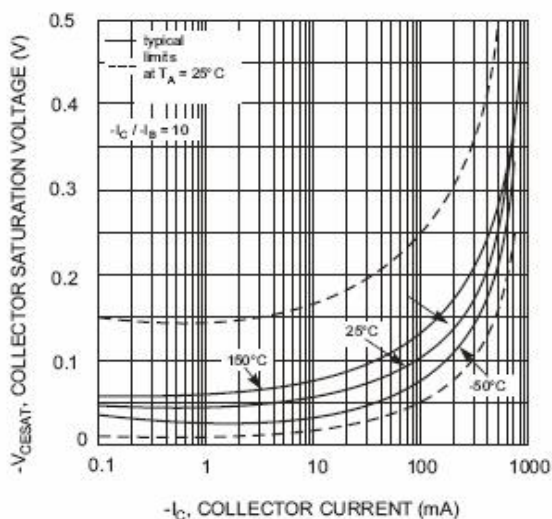


Fig. 3, Collector Sat. Voltage vs Collector Current

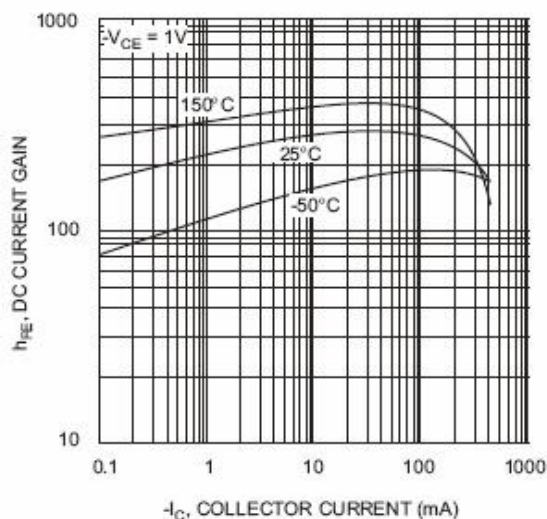


Fig. 4, DC Current Gain vs Collector Current

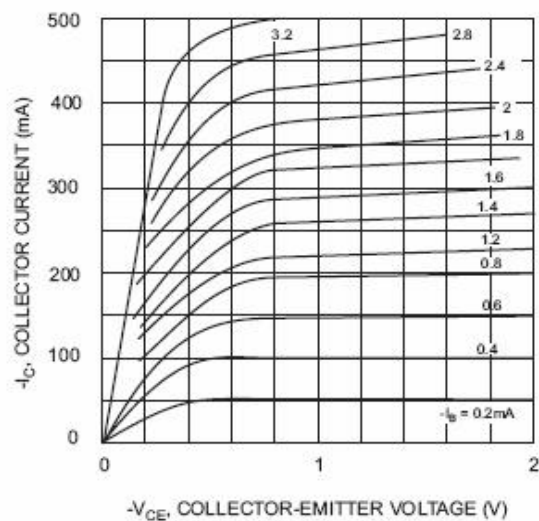


Fig. 5, Typical Emitter-Collector Characteristics

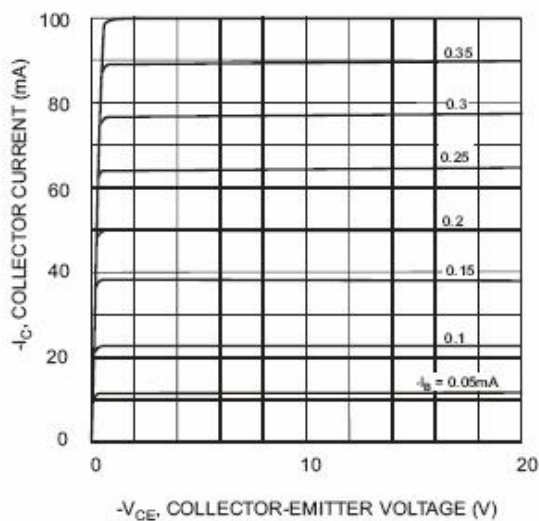
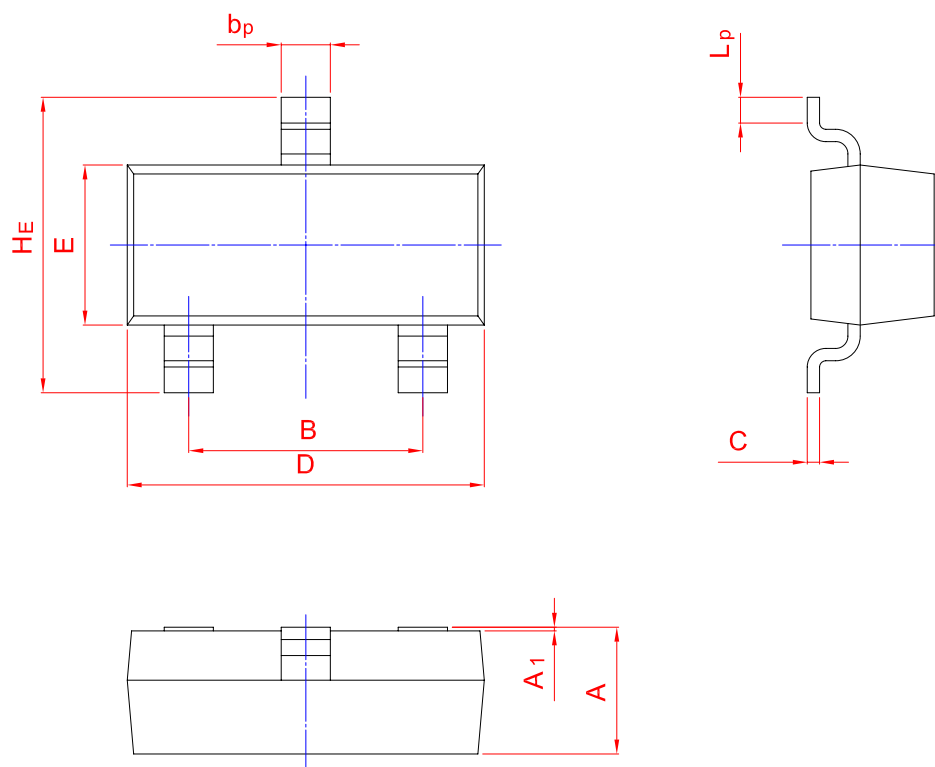


Fig. 6, Typical Emitter-Collector Characteristics

PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

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UNIT	A	B	b_p	C	D	E	H_E	A_1	L_p
mm	1.40 0.95	2.04 1.78	0.50 0.35	0.19 0.08	3.10 2.70	1.65 1.20	3.00 2.20	0.100 0.013	0.50 0.20