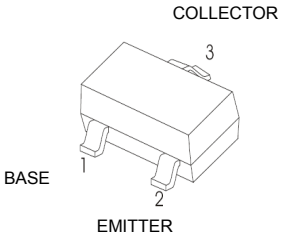


SOT-23

TRANSISTOR (PNP)

FEATURES

- Ideally suited for automatic insertion
- For Switching and AF Amplifier Applications

MARKING:3E

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

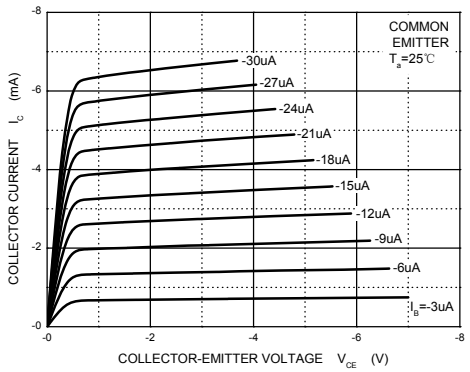
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-45	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current –Continuous	-0.1	A
P_C	Collector Power Dissipation	225	mW
$R_{\Theta JA}$	Thermal Resistance From Junction To Ambient	625	℃/W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-65～+150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

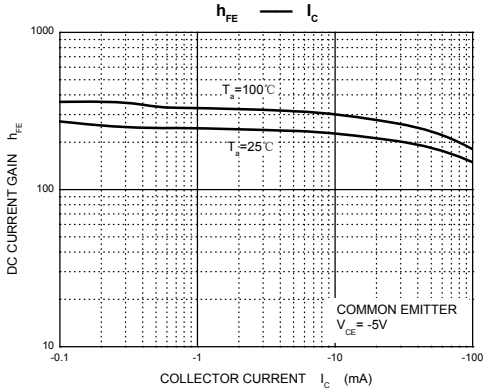
Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V_{CBO}	I_C= -10μA, I_E=0	-50		V
Collector-emitter breakdown voltage	V_{CEO}	I_C= -10mA, I_B=0	-45		V
Emitter-base breakdown voltage	V_{EBO}	I_E= -1μA, I_C=0	-5		V
Collector cut-off current	I_{CBO}	V_{CB}= -45 V , I_E=0		-0.1	μA
Collector cut-off current	I_{CEO}	V_{CE}= -40 V , I_B=0		-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}= -5 V , I_C=0		-0.1	μA
DC current gain	h_{FE}	V_{CE}= -5V,I_C= -2mA	125	250	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-100mA,I_B= -5 mA		-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C= -100mA, I_B= -5mA		-1.1	V
Transition frequency	f_T	V_{CE}= -5 V, I_C= -10mA f=100MHz	100		MHz
Collector capacitance	C_{ob}	V_{CB}=-10V, f=1MHz		4.5	pF

Typical Characteristics

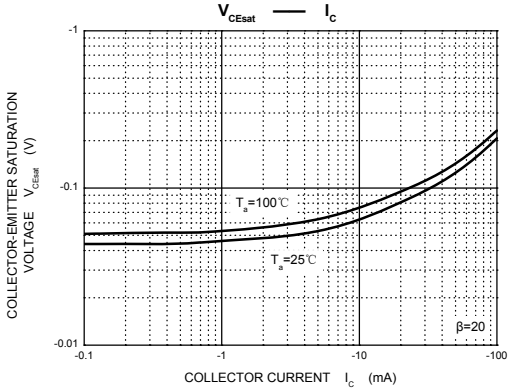
Static Characteristic



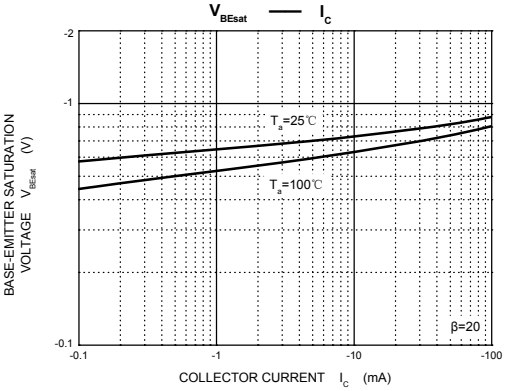
h_{FE} — I_C



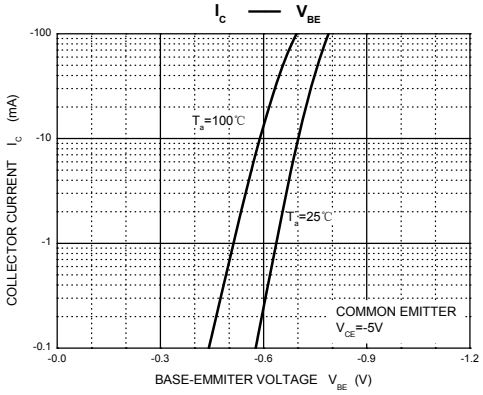
V_{CEsat} — I_C



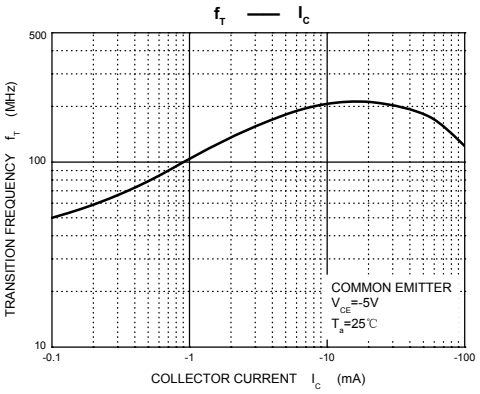
V_{BEsat} — I_C



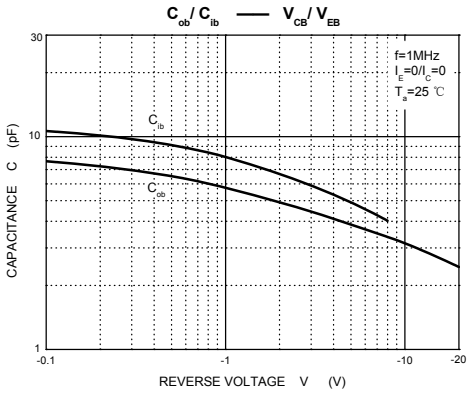
I_C — V_{BE}



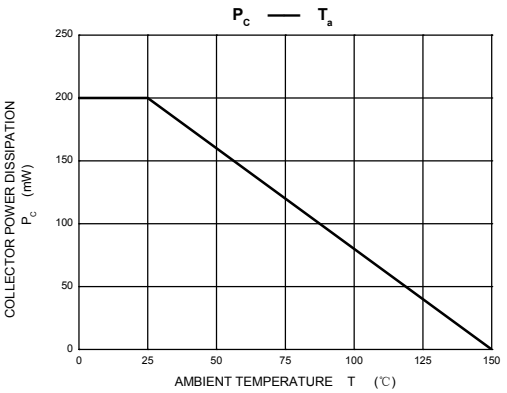
f_T — I_C



C_{ob} / C_{ib} — V_{CB} / V_{EB}

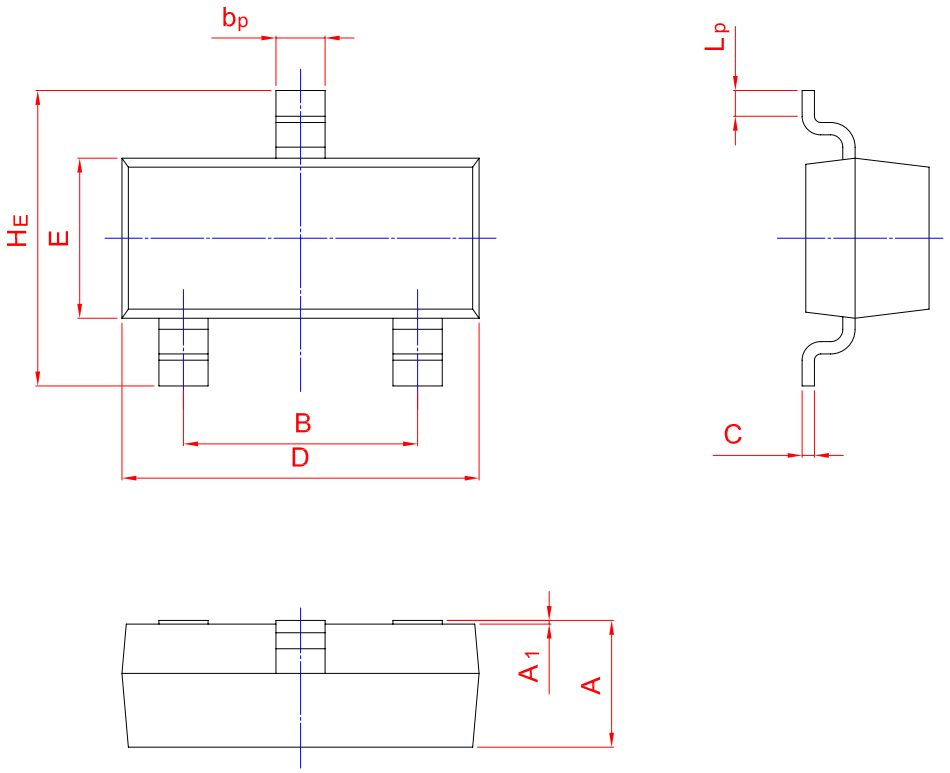


P_C — T_a



PACKAGE OUTLINE

Plastic surface mounted package; 3 leads **SOT-23**



UNIT	A	B	bp	C	D	E	HE	A1	Lp
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