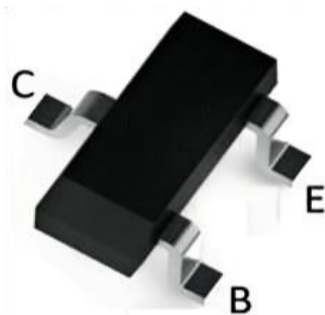


FEATURES

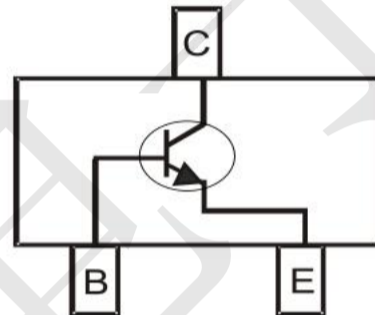
- Complementary to BC856B
- Ideally suited for automatic insertion
- For switching and AF amplifier applications
- Surface Mount device

MECHANICAL DATA

- Case: SOT-23
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Weight: 0.008 grams (approximate)



SOT-23



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

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	80	V
Collector-Emitter Voltage	V_{CEO}	65	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	100	mA
Collector Power Dissipation	P_C	200	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	625	$^\circ\text{C/W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 ~ +150	$^\circ\text{C}$

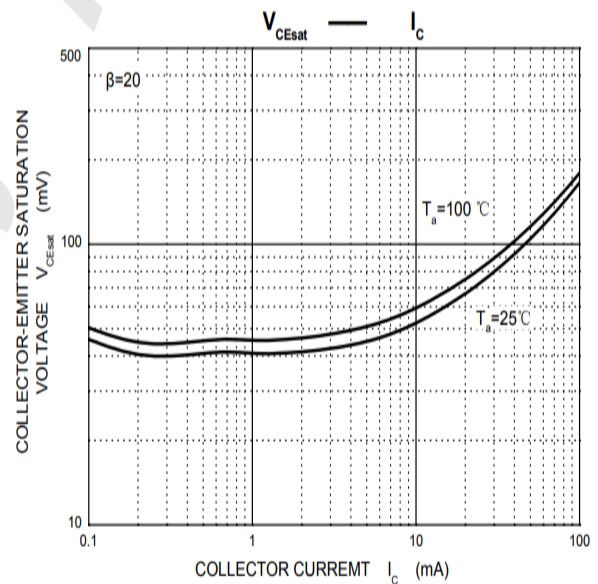
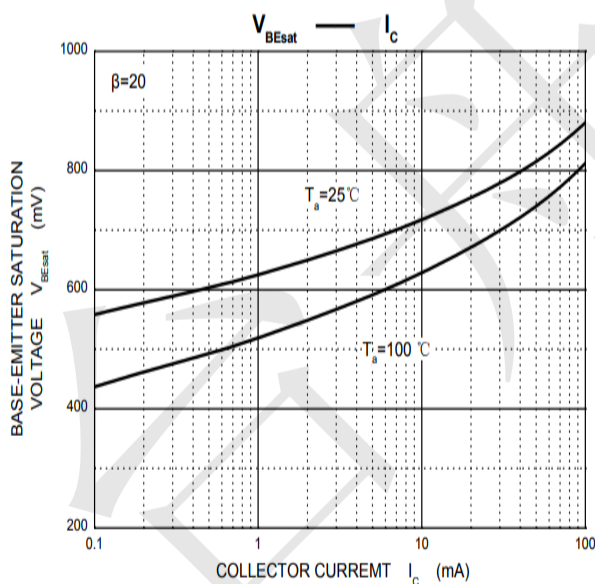
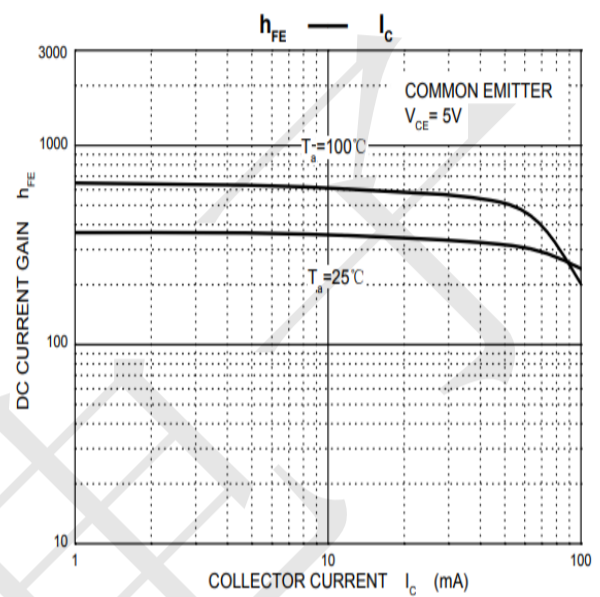
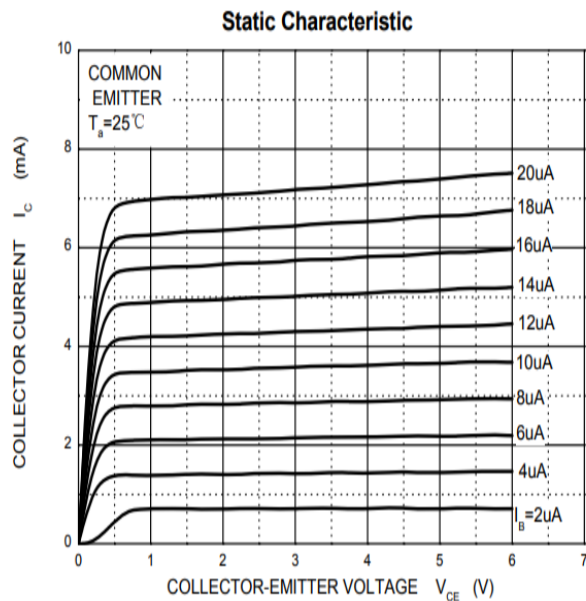
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

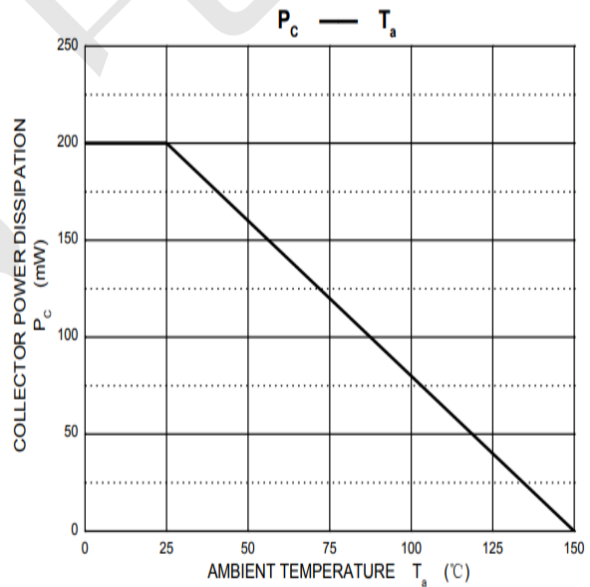
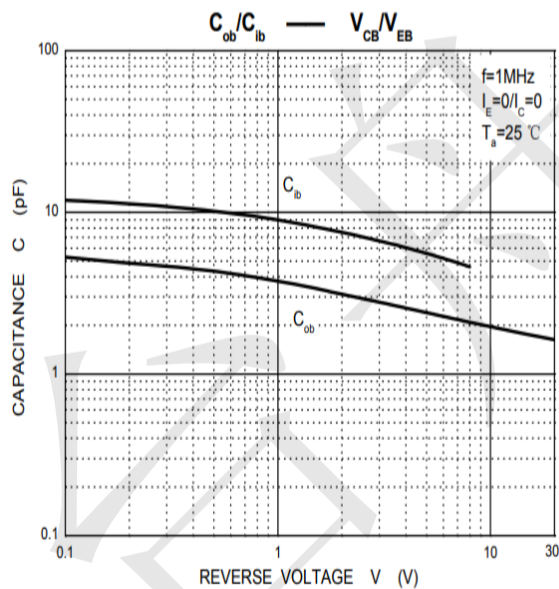
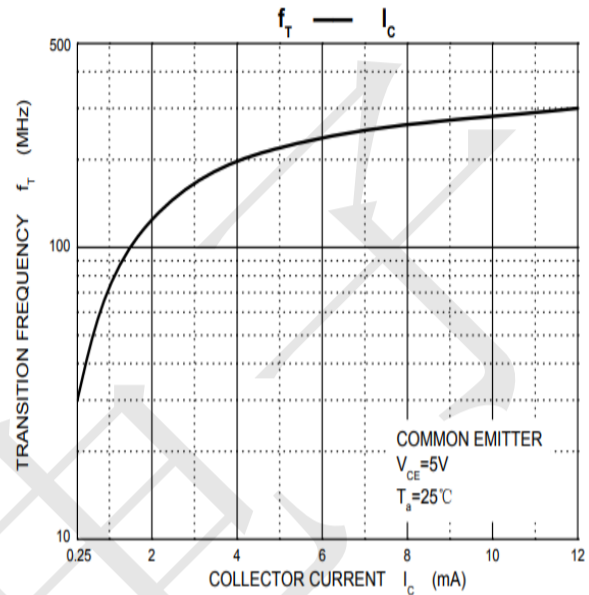
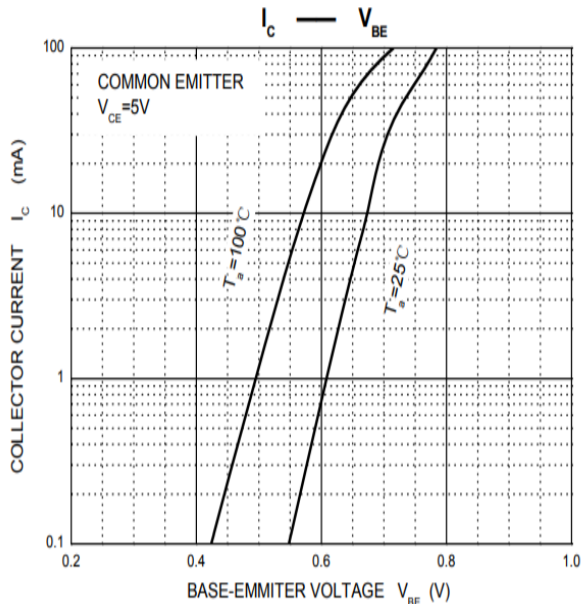
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Collector-base breakdown voltage	$V_{(BR)CBO}$	80			V	$I_C=10\mu\text{A}$, $I_E=0$
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	65			V	$I_C=10\text{mA}$, $I_B=0$
Emitter-base breakdown voltage	$V_{(BR)EBO}$	6			V	$I_E=10\mu\text{A}$, $I_C=0$
Collector cut-off current	I_{CBO}			0.1	μA	$V_{CB}=70\text{V}$, $I_E=0$
Emitter cut-off current	I_{EBO}			0.1	μA	$V_{EB}=5\text{V}$, $I_C=0$
DC current gain	h_{FE1}	100		800		$V_{CE}=5\text{V}$, $I_C=2\text{mA}$
Collector-emitter saturation voltage	$V_{CE(sat)}$			0.5	V	$I_C=100\text{mA}$, $I_B=5\text{mA}$
Base-emitter saturation voltage	$V_{BE(sat)}$			1.1	V	$I_C=100\text{mA}$, $I_B=5\text{mA}$
Transition frequency	f_T	100			MHz	$V_{CE}=5\text{V}$, $I_C=10\text{mA}$, $f=100\text{MHz}$
Collector output capacitance	C_{ob}			4.5	pF	$V_{CE}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$

CLASSIFICATION OF h_{FE}

Rank	846A	846B	846C
Range	110-220	200-450	420-800

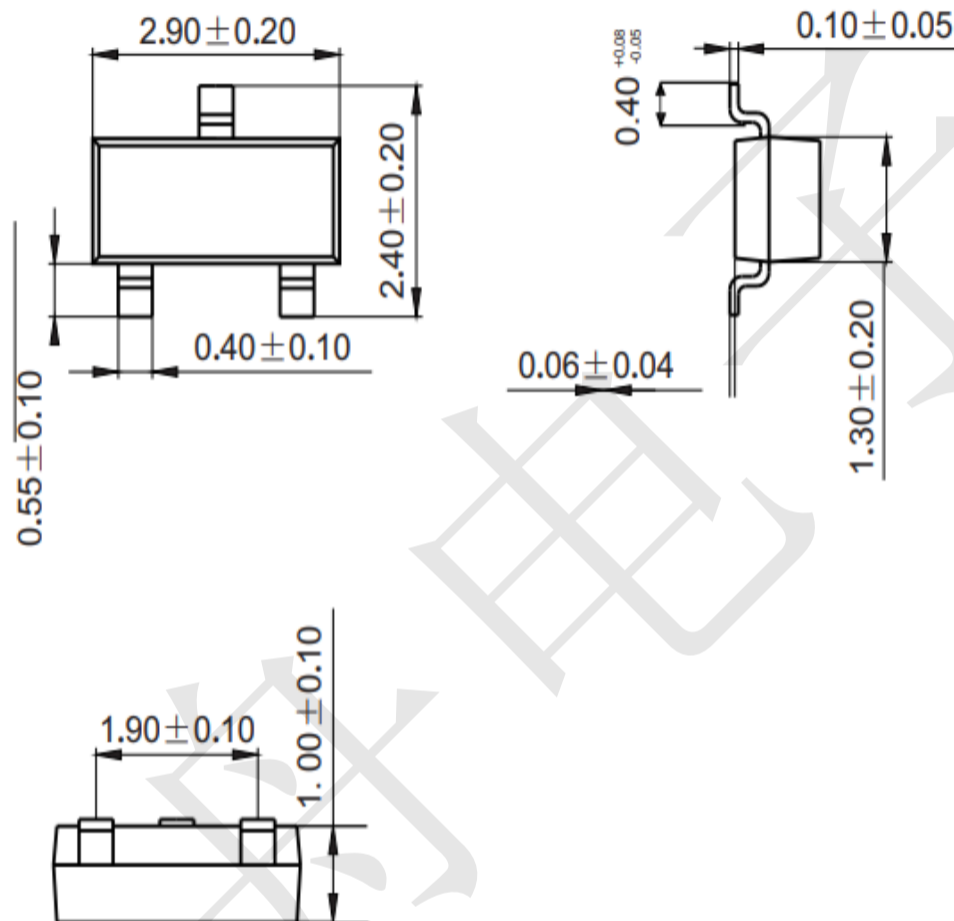
Typical Characteristics





Package information (Unit:mm)

SOT-23



Mounting Pad Layout (Unit:mm)

