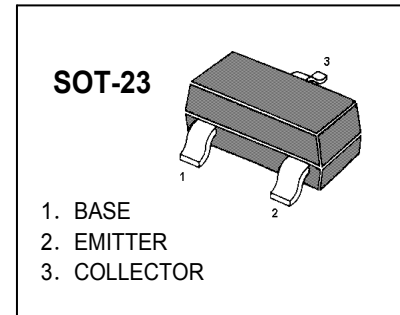


## SOT-23 Plastic-Encapsulate Transistors

### MMBTA92 TRANSISTOR (PNP)

#### FEATURES

High voltage transistor



#### MARKING:2D

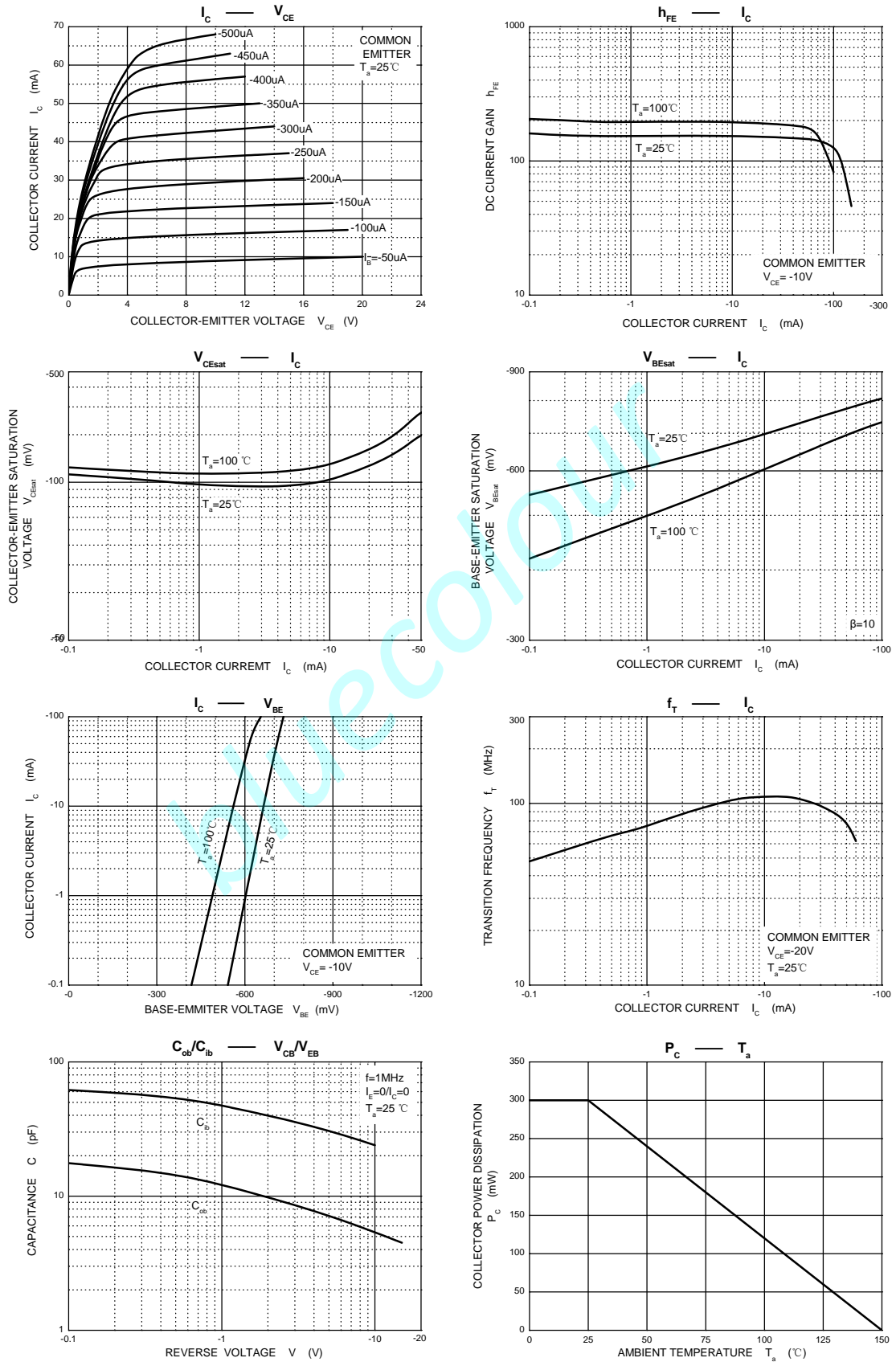
#### MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V <sub>CBO</sub>	Collector-Base Voltage	-300	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-300	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current -Continuous	-200	mA
I <sub>CM</sub>	Collector Current -Pulsed	-500	mA
P <sub>C</sub>	Collector Power Dissipation	300	mW
T <sub>j</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55-150	°C
R <sub>θJA</sub>		417	°C/mW

#### ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = -100μA, I <sub>E</sub> =0	-300		V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = -1mA, I <sub>B</sub> =0	-300		V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> = -100μA, I <sub>C</sub> =0	-5		V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =-200V, I <sub>E</sub> =0		-0.25	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = -5V, I <sub>C</sub> =0		-0.1	μA
DC current gain	h <sub>FE(1)</sub>	V <sub>CE</sub> = -10V, I <sub>C</sub> = -1mA	60		
	h <sub>FE(2)</sub>	V <sub>CE</sub> = -10V, I <sub>C</sub> =-10mA	100	200	
	h <sub>FE(3)</sub>	V <sub>CE</sub> = -10V, I <sub>C</sub> =-30mA	60		
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-20mA, I <sub>B</sub> = -2mA		-0.2	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> = -20mA, I <sub>B</sub> = -2mA		-0.9	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =-20V, I <sub>C</sub> = -10mA f=30MHz	50		MHz

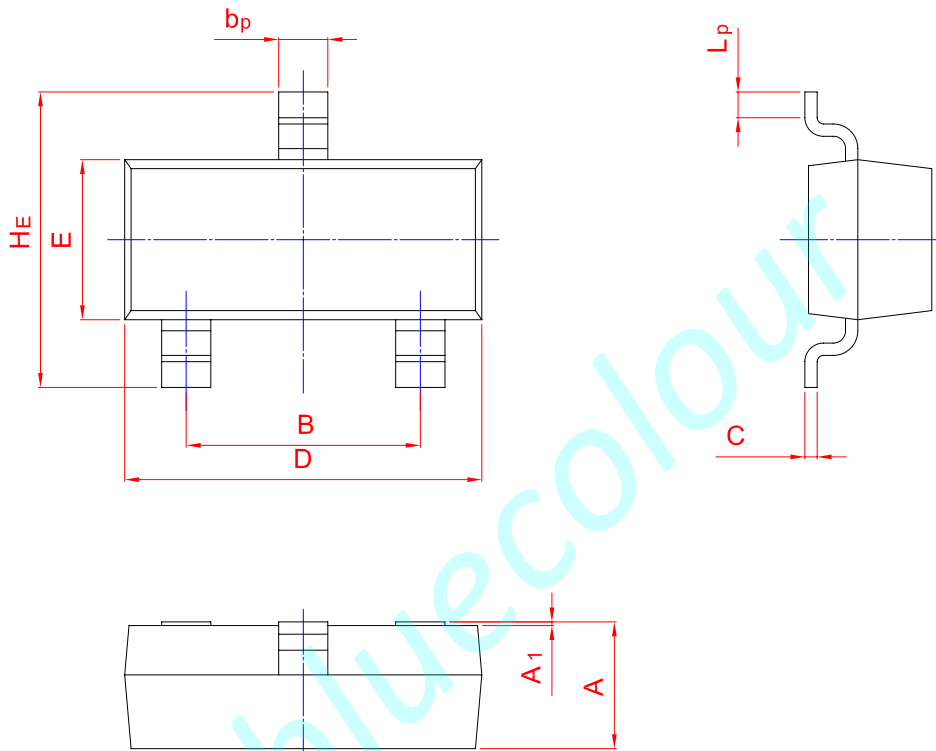
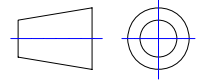
## Typical Characteristics



## PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



UNIT	A	B	bp	C	D	E	HE	A1	Lp
mm	1.40	2.04	0.50	0.19	3.10	1.65	3.00	0.100	0.50
	0.95	1.78	0.35	0.08	2.70	1.20	2.20	0.013	0.20