

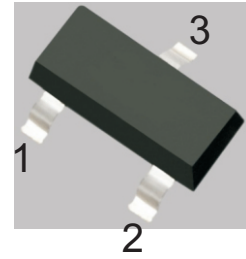
MMBTA92

PNP TRANSISTOR

FEATURES

- High Voltage Transistor

SOT-23



- 1.BASE
- 2.EMITTER
- 3.COLLECTOR

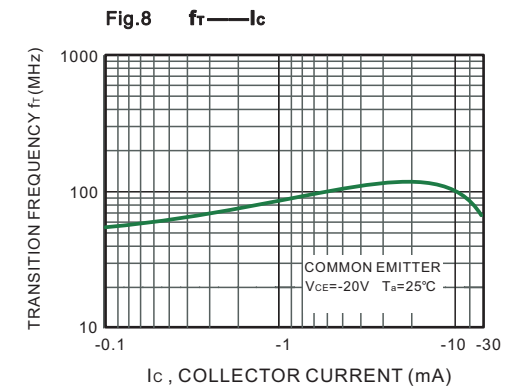
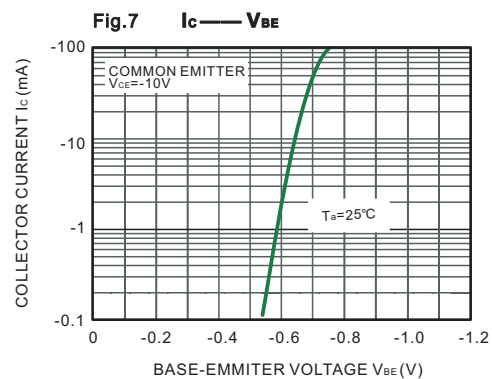
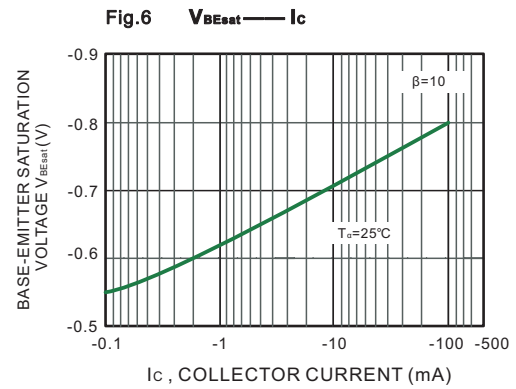
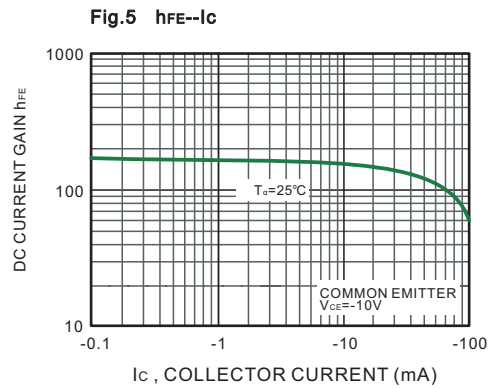
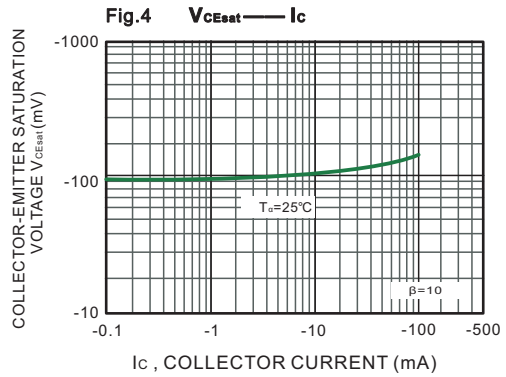
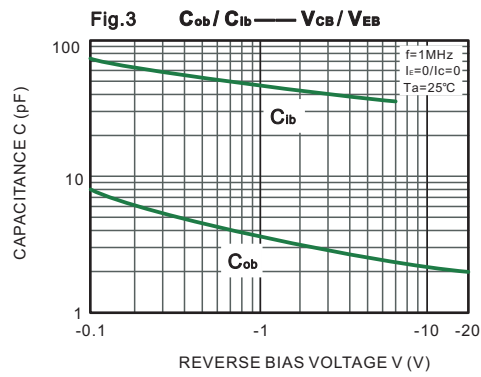
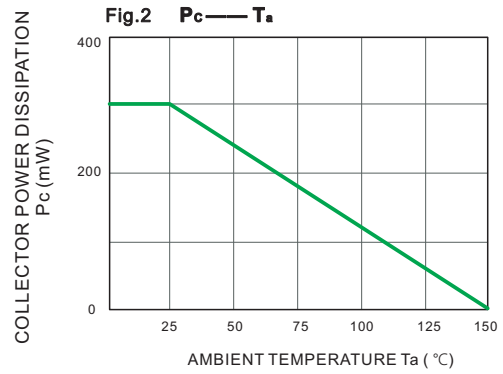
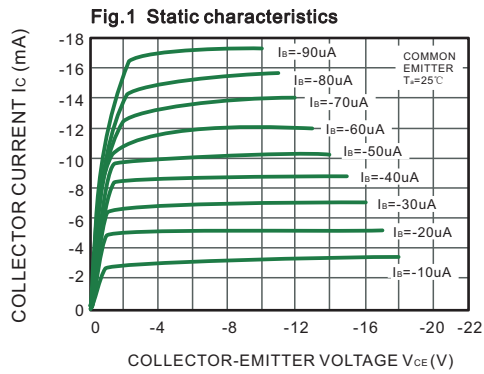
MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector–Base Voltage	V_{CB0}	-300	V
Collector–Emitter Voltage	V_{CEO}	-300	V
Emitter–Base Voltage	V_{EBO}	-5	V
Collector Current — Continuous	I_C	-200	mA
Collector Current -Pulsed	I_{CM}	-500	mA
Collector Power Dissipation	P_C	300	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55~+150	°C
Thermal Resistance, Junction to Ambient	R_{thJA}	410	°C/W

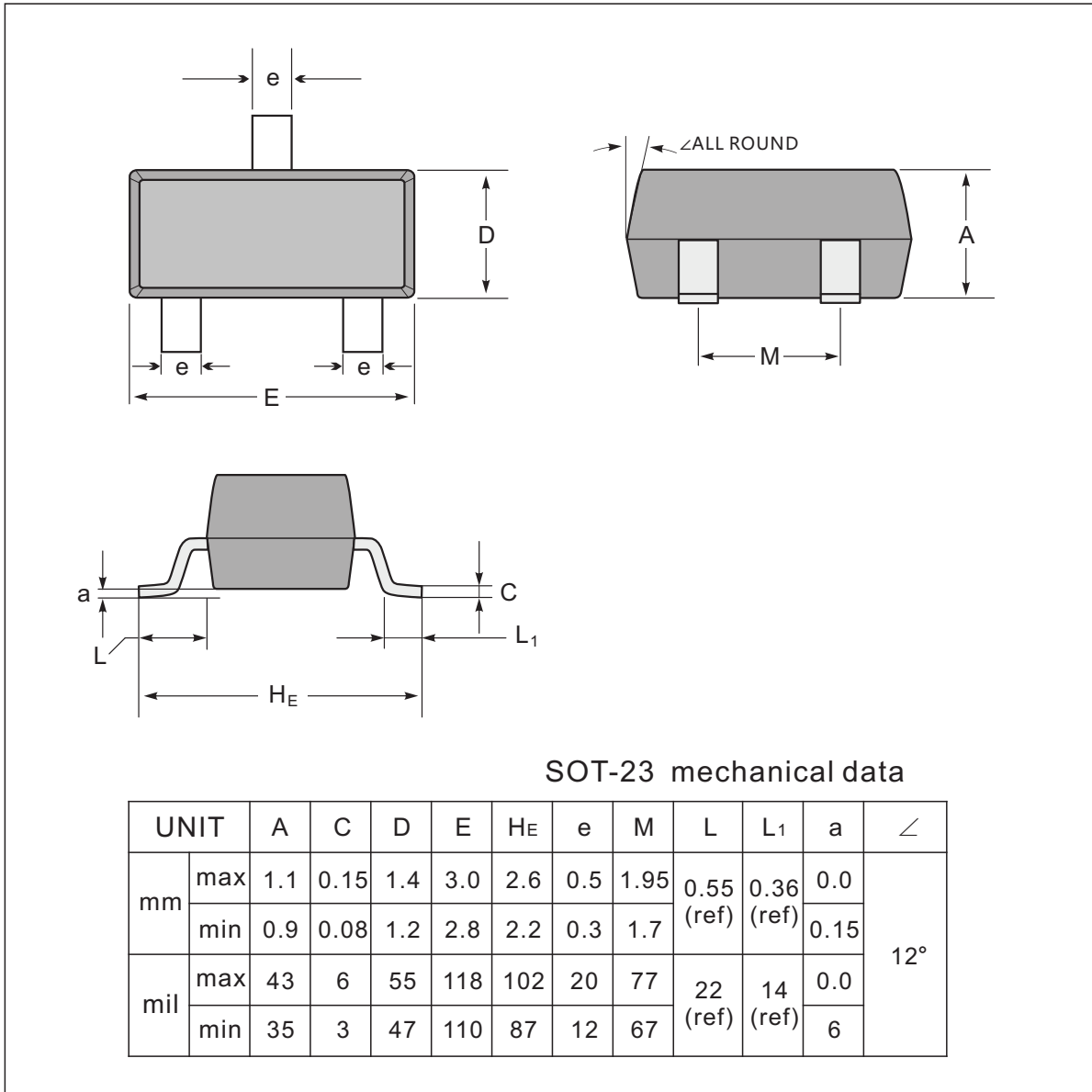
ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted.)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CB0}$	$I_C = -100\mu A, I_E = 0$	-300		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1mA, I_B = 0$	-300		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu A, I_C = 0$	-5		V
Collector cut-off current	I_{CBO}	$V_{CB} = -200V, I_E = 0$		-0.25	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5V, I_C = 0$		-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -10V, I_C = -1mA$	60		
	$h_{FE(2)}$	$V_{CE} = -10V, I_C = -10mA$	100	200	
	$h_{FE(3)}$	$V_{CE} = -10V, I_C = -30mA$	60		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -20mA, I_B = -2mA$		-0.2	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -20mA, I_B = -2mA$		-0.9	V
Transition frequency	f_T	$V_{CE} = -20V, I_C = -10mA, f = 30MHz$	50		MHz

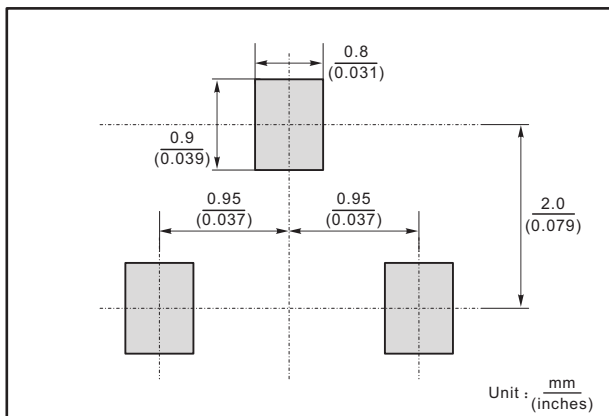
TYPICAL CHARACTERISTICS



SOT-23 Package Outline Dimensions



The recommended mounting pad size

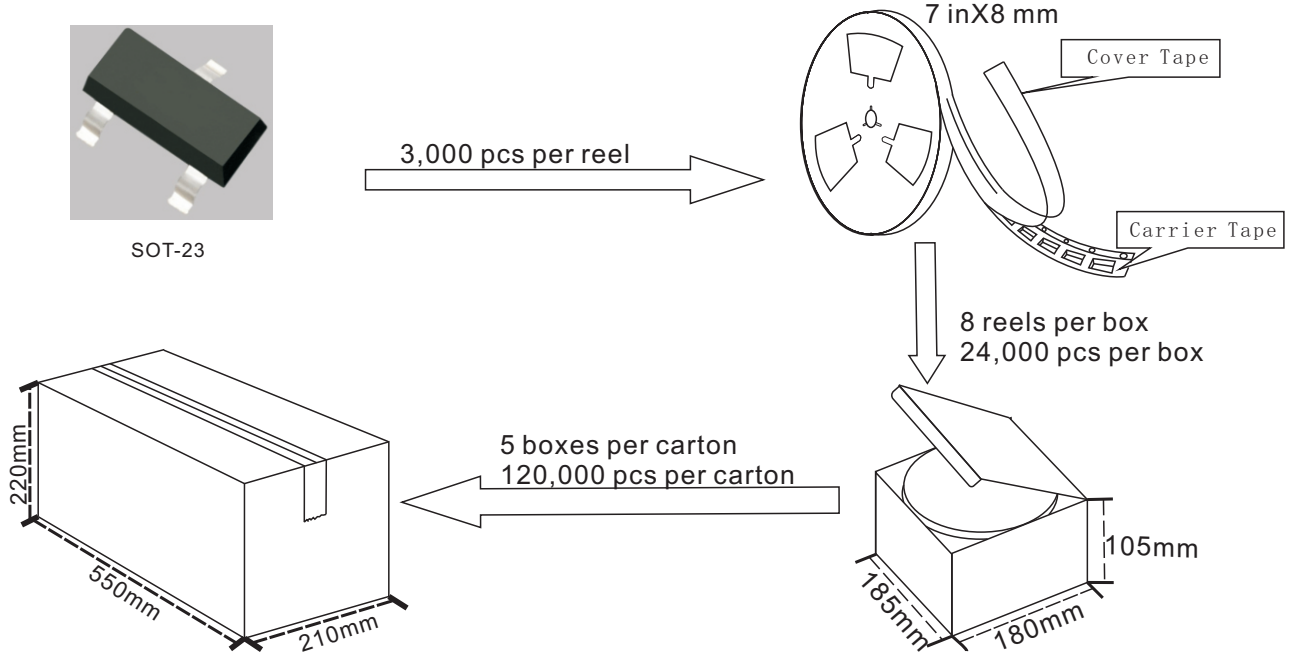


Marking

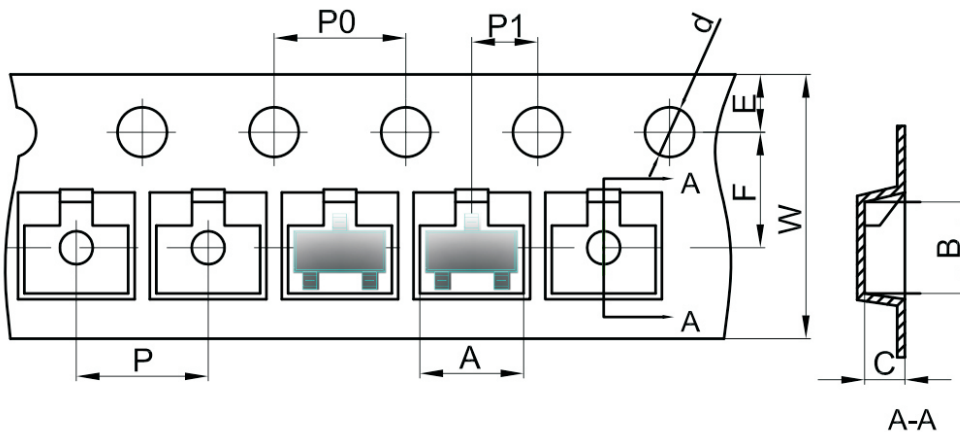
Type number	Marking code
MMBTA92	2D

SOT-23 Packing

1. The method of packaging and dimension are shown as below figure. (Dimension in mm)



SOT-23 Embossed Carrier Tape



Dimensions are in millimeter

Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT-23 Tape Leader and Trailer

