

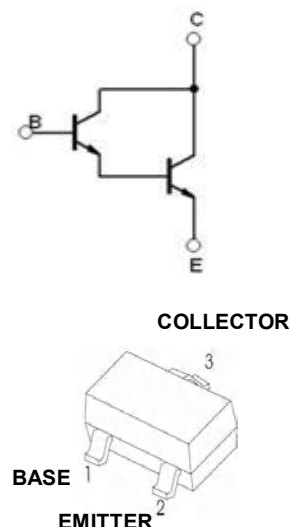


MMBTA28 TRANSISTOR (NPN)

FEATURES

- High Current Gain

MARKING: 3SS



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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	80	V
V_{EBO}	Emitter-Base Voltage	12	V
I_C	Collector Current	500	mA
P_C	Collector Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	625	$^{\circ}\text{C/W}$
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

SOT - 23

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

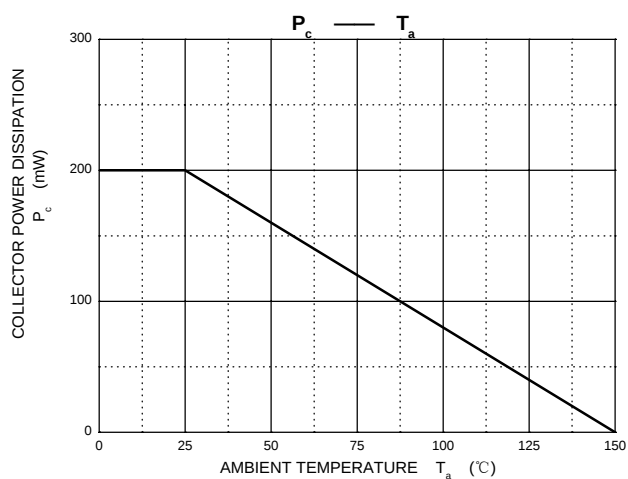
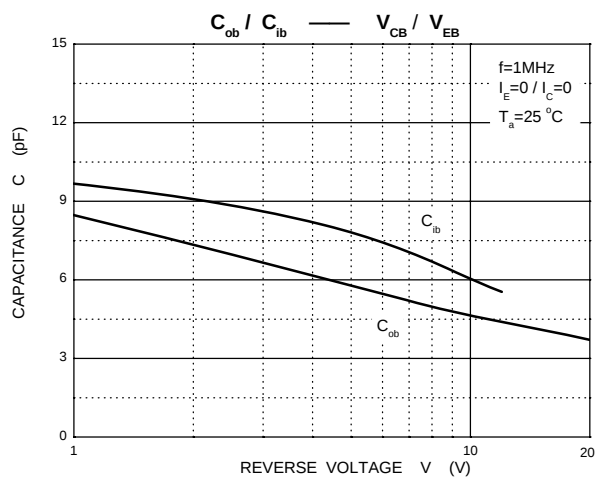
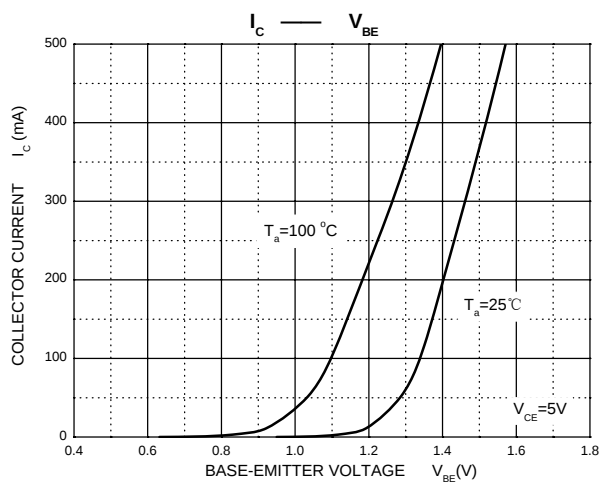
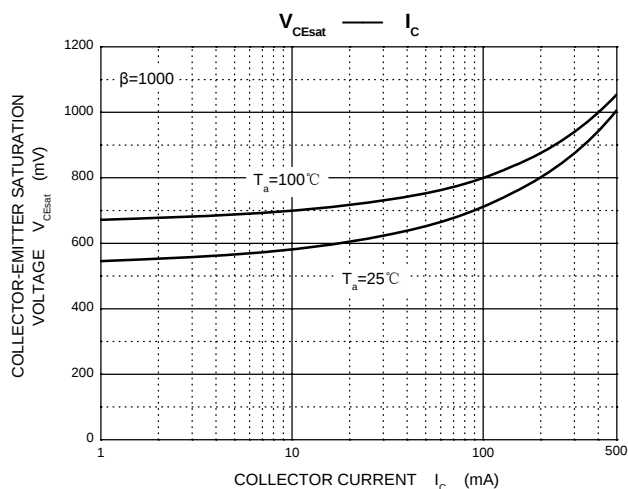
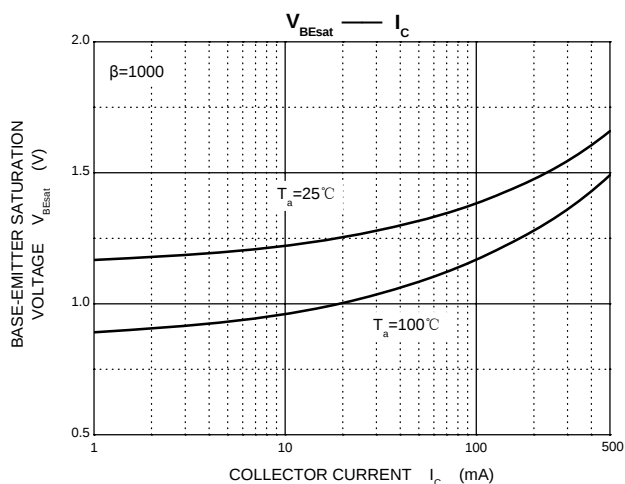
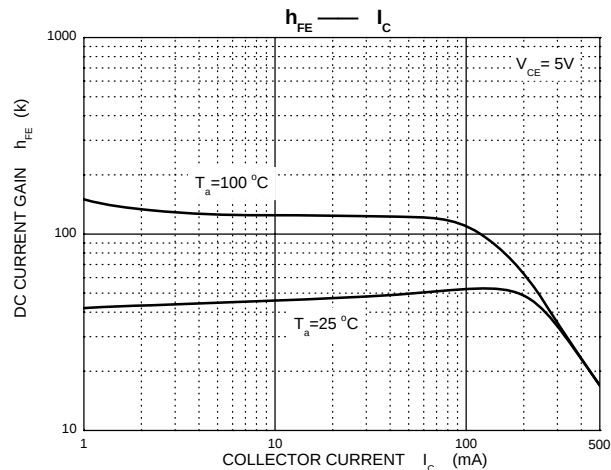
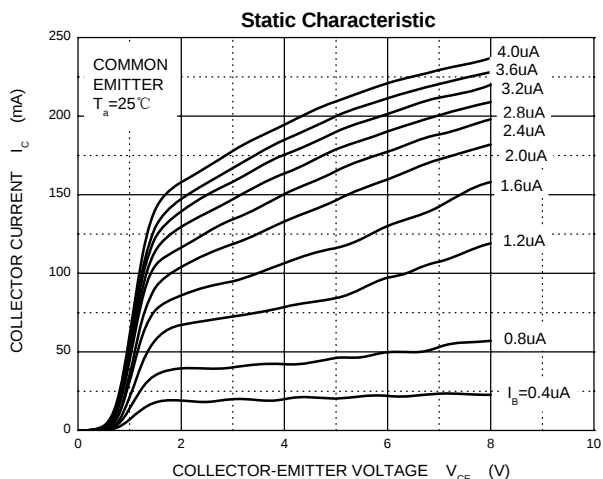
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\times A, I_E=0$	80			V
Collector-emitter sustain voltage	$V_{CEO(sus)}$	$I_C=100\times A, V_{BE}=0$	80			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\times A, I_C=0$	12			V
Collector cut-off current	I_{CBO}	$V_{CB}=60V, I_E=0$			0.1	$\times A$
Collector cut-off current	I_{CES}	$V_{CE}=60V, V_{BE}=0$			0.5	$\times A$
Emitter cut-off current	I_{EBO}	$V_{EB}=10V, I_C=0$			0.1	$\times A$
DC current gain	$h_{FE(1)}^*$	$V_{CE}=5V, I_C=10mA$	10			K
	$h_{FE(2)}^*$	$V_{CE}=5V, I_C=100mA$	10			K
Collector-emitter saturation voltage	$V_{CE(sat)1}^*$	$I_C=10mA, I_B=0.01mA$			1.2	V
	$V_{CE(sat)2}^*$	$I_C=100mA, I_B=0.1mA$			1.5	V
Base-emitter voltage	V_{BE}^*	$V_{CE}=5V, I_C=100mA$			2	V
Collector output capacitance	C_{ob}	$V_{CB}=1V, I_E=0, f=1MHz$			8	pF
Transition frequency	f_T	$V_{CE}=5V, I_C=10mA, f=100MHz$	125			MHz

*Pulse test: pulse width $\hat{O}800> s$, duty cycle $\hat{O}2.0\%$.



迈拓电子

MAITUO ELECTRONIC

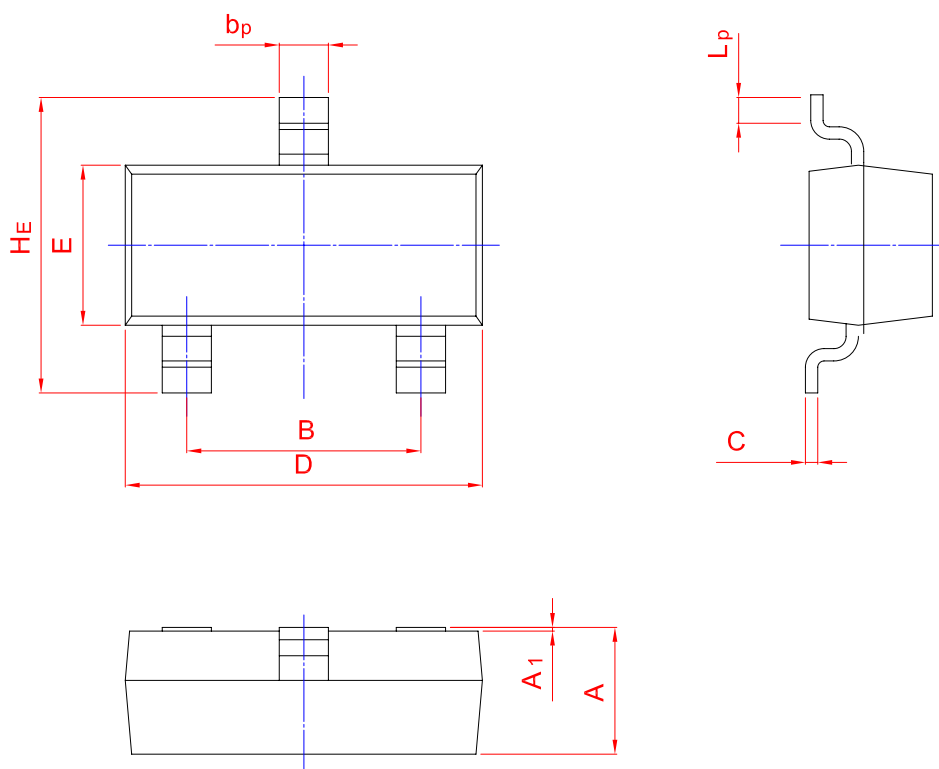
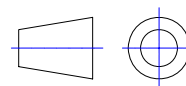




PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



UNIT	A	B	bp	C	D	E	HE	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