

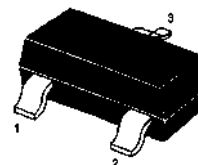


MMBTSA1298

PNP Silicon Epitaxial Planar Transistor

for low frequency power amplifier and power switching applications

The transistor is subdivided into two groups, O and Y according to its DC current gain.



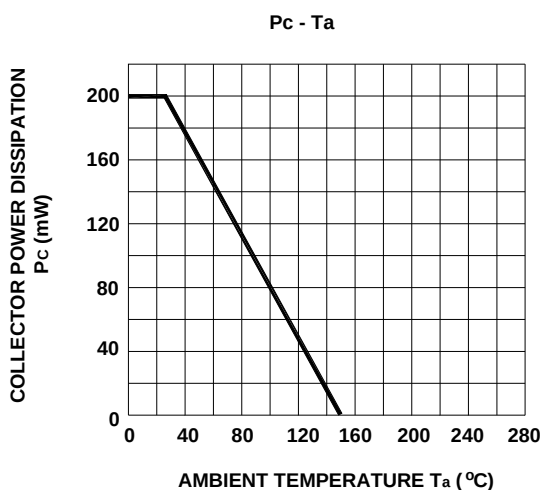
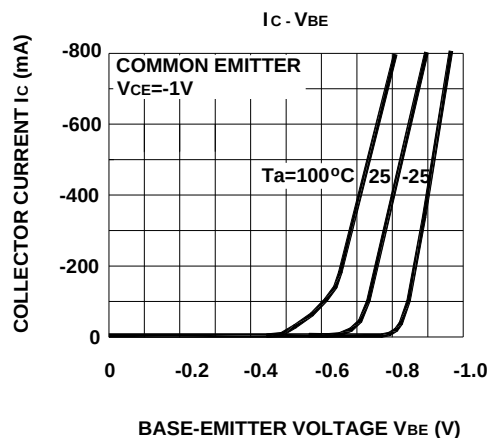
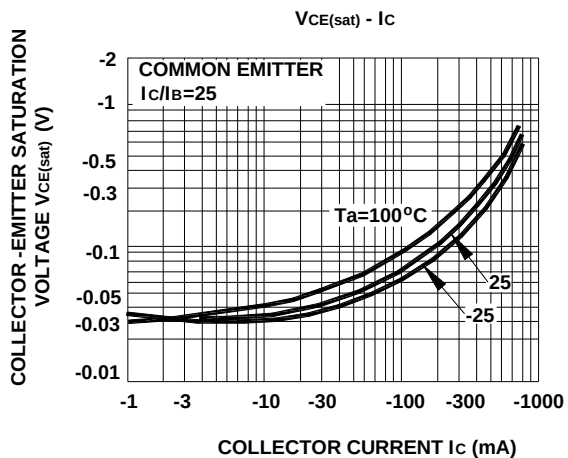
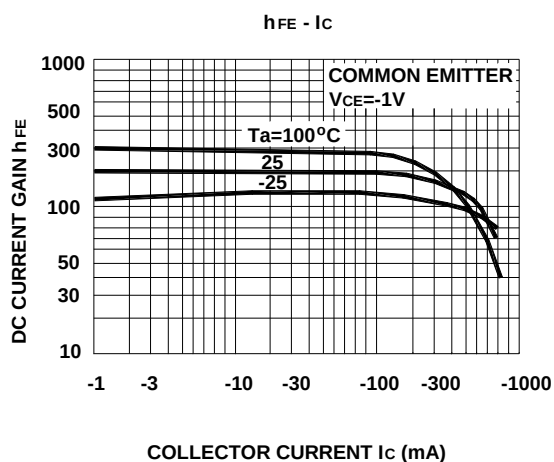
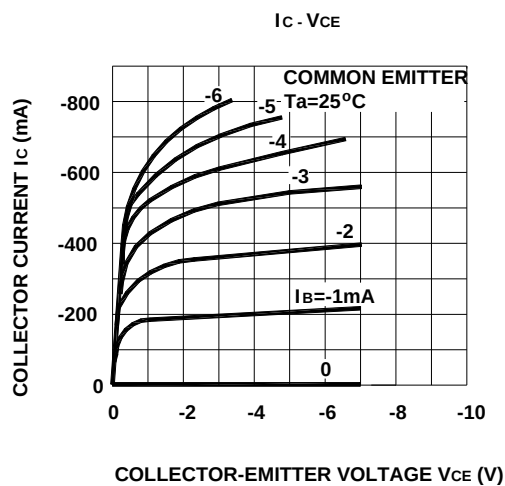
1.BASE 2.EMITTER 3.COLLECTOR

Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	30	V
Collector Emitter Voltage	$-V_{CEO}$	25	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	800	mA
Base Current	$-I_B$	160	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{Stg}	-55 to +150	$^{\circ}\text{C}$

Characteristics at $T_{amb}=25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE} = 1\text{ V}$, $-I_C = 100\text{ mA}$ at $-V_{CE} = 1\text{ V}$, $-I_C = 800\text{ mA}$	O Y h_{FE} h_{FE} h_{FE}	100	-	200	-
		160	-	320	-
		30	-	-	-
Collector Cutoff Current at $-V_{CB} = 30\text{ V}$	$-I_{CBO}$	-	-	0.1	μA
Emitter Cutoff Current at $-V_{EB} = 5\text{ V}$	$-I_{EBO}$	-	-	0.1	μA
Collector Saturation Voltage at $-I_C = 500\text{ mA}$, $-I_B = 20\text{ mA}$	$-V_{CE(sat)}$	-	-	0.4	V
Base Emitter Voltage at $-V_{CE} = 1\text{ V}$, $-I_C = 10\text{ mA}$	$-V_{BE}$	0.5	-	0.8	V
Collector Emitter Breakdown Voltage at $-I_C = 10\text{ mA}$	$-V_{(BR)CEO}$	25	-	-	V
Emitter Base Breakdown Voltage at $-I_E = 0.1\text{ mA}$	$-V_{(BR)EBO}$	5	-	-	V
Transition Frequency at $-V_{CE} = 5\text{ V}$, $-I_C = 10\text{ mA}$	f_T	-	120	-	MHz
Collector Output Capacitance at $-V_{CB} = 10\text{ V}$, $f = 1\text{ MHz}$	C_{ob}	-	13	-	pF

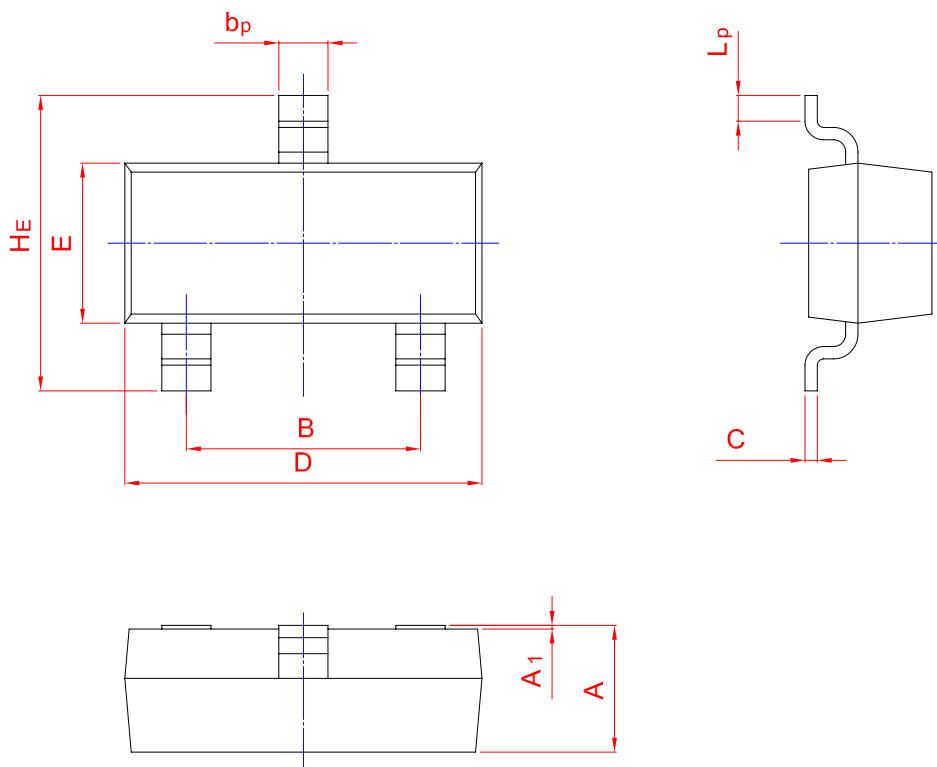
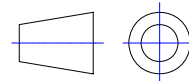




PACKAGE OUTLINE

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