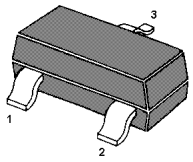
MMBTSA1365 PNP Silicon Epitaxial Planar Transistor

for high current drive application

The transistor is subdivided into three groups E, F and G according to its DC current gain.



1.Base 2.Emitter 3.Collector
SOT-23 Plastic Package

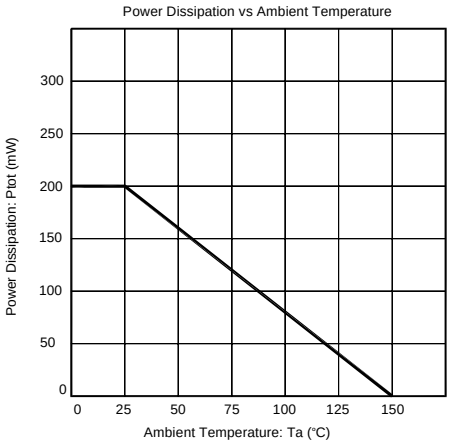
Absolute Maximum Ratings (T_a = 25 °C)

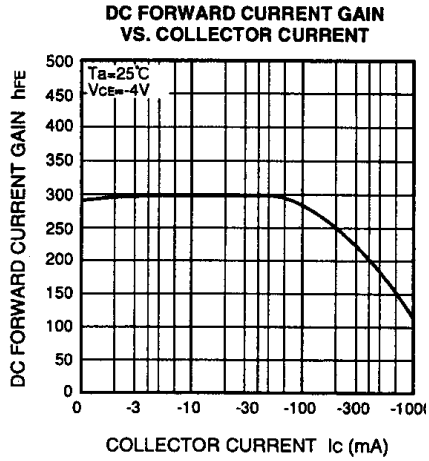
Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	25	V
Collector Emitter Voltage	$-V_{CEO}$	20	V
Emitter Base Voltage	$-V_{EBO}$	4	V
Collector Current	$-I_C$	700	mA
Peak Collector Current	$-I_{CM}$	1	A
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_S	- 55 to + 150	°C

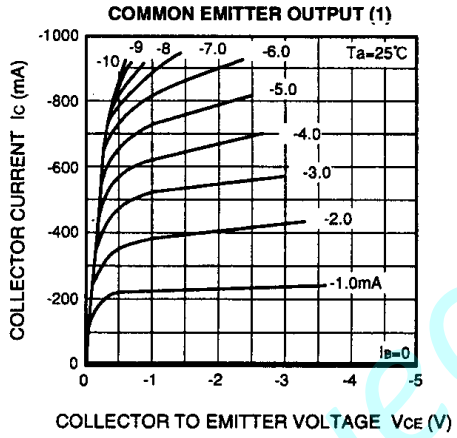
Characteristics at T_a = 25 °C

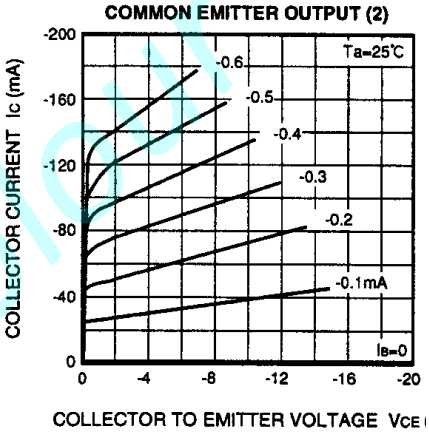
Parameter		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE}$ = 4 V, $-I_C$ = 100 mA	E	h_{FE}	150	-	300	-
	F	h_{FE}	250	-	500	-
	G	h_{FE}	400	-	800	-
Collector Cutoff Current at $-V_{CB}$ = 25 V		$-I_{CBO}$	-	-	1	µA
Emitter Cutoff Current at $-V_{EB}$ = 2 V		$-I_{EBO}$	-	-	1	µA
Collector Base Breakdown Voltage at $-I_C$ = 10 µA		$-V_{(BR)CBO}$	25	-	-	V
Collector Emitter Breakdown Voltage at $-I_C$ = 100 µA		$-V_{(BR)CEO}$	20	-	-	V
Emitter Base Breakdown Voltage at $-I_E$ = 10 µA		$-V_{(BR)EBO}$	4	-	-	V
Collector Saturation Voltage at $-I_C$ = 500 mA, $-I_B$ = 25 mA		$-V_{CE(sat)}$	-	-	0.5	V
Transition Frequency at $-V_{CE}$ = 6 V, I_E = 10 mA		f_T	-	180	-	MHz

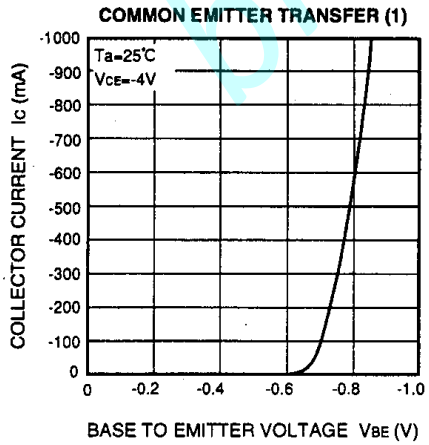
Typical Characteristics

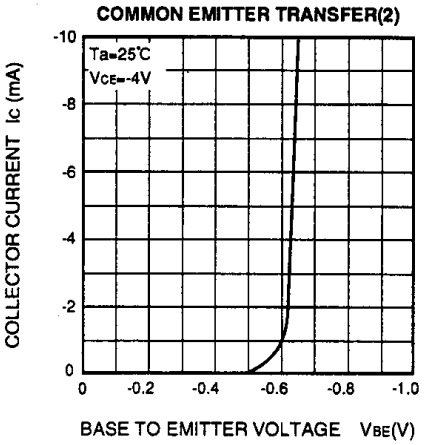






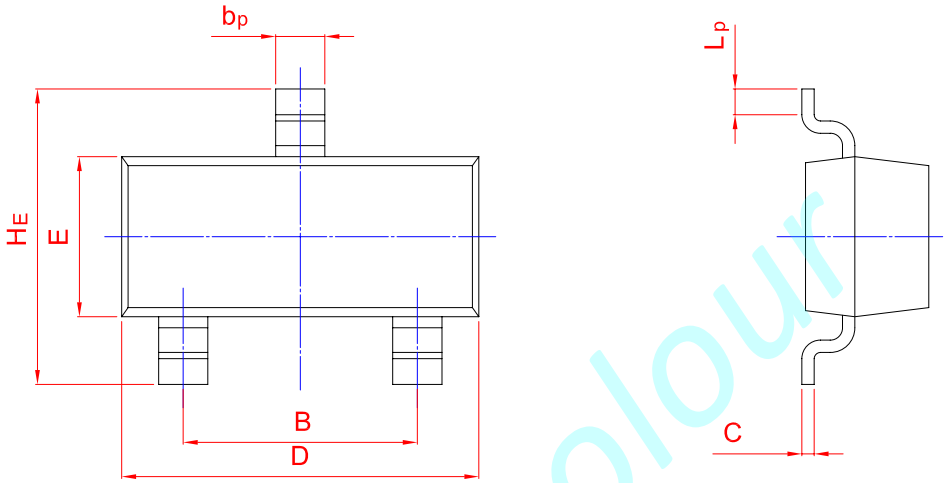






PACKAGE OUTLINE

Plastic surface mounted package; 3 leads **SOT-23**



UNIT	A	B	bp	C	D	E	HE	A1	Lp
mm	1.40 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