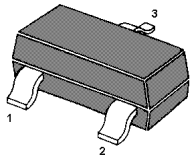
MMBTA56 PNP General Purpose Transistor

FEATURES

- General Purpose Amplifier Applications

MARKING: 2GM



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

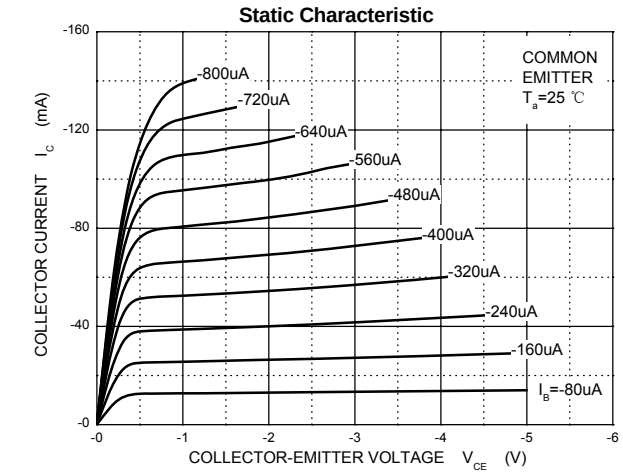
Absolute Maximum Ratings (T_a = 25 °C)

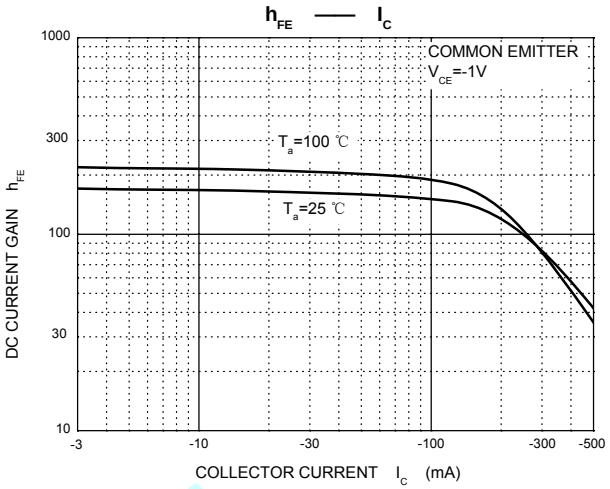
	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	80	V
Collector Emitter Voltage	$-V_{CEO}$	80	V
Emitter Base Voltage	$-V_{EBO}$	4	V
Collector Current	$-I_C$	500	mA
Total Device Dissipation Derate above 25°C	P_{tot}	200 2.8	mW mW/°C
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	357	°C/W
Junction Temperature	T_j	-55 to +150	°C
Storage Temperature Range	T_S	-55 to +150	°C

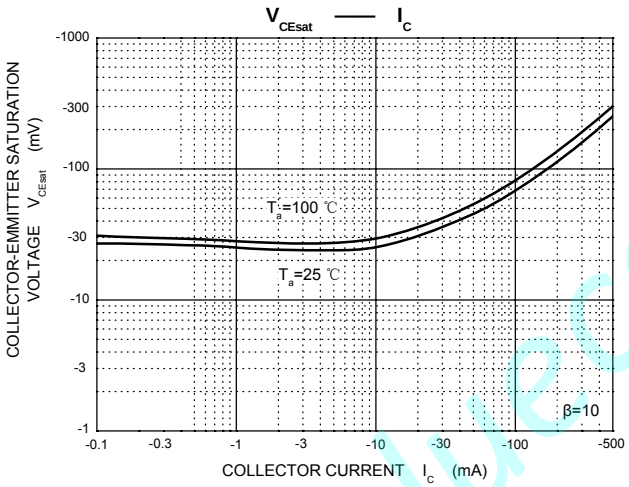
Characteristics at T_{amb}=25 °C

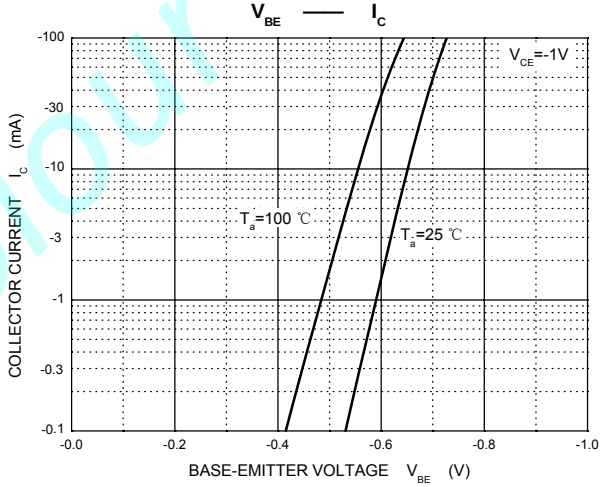
	Symbol	Min.	Max.	Unit
DC Current Gain at $-I_C$=10mA, $-V_{CE}$=1V at $-I_C$=100mA, $-V_{CE}$=1V	 h_{FE} h_{FE}	 100 100	 400 -	 - -
Collector Cutoff Current at $-V_{CB}$=80V	$-I_{CBO}$	-	0.1	μA
Collector Cutoff Current at $-V_{CE}$=60V	$-I_{CEO}$	-	0.1	μA
Collector Emitter Breakdown Voltage at $-I_C$=1mA	$-V_{(BR)CEO}$	80	-	V
Collector Base Breakdown Voltage at $-I_C$=100μA	$-V_{(BR)CBO}$	80	-	V
Emitter Base Breakdown Voltage at $-I_E$=100μA	$-V_{(BR)EBO}$	4	-	V
Collector Emitter Saturation Voltage at $-I_C$=100mA, $-I_B$=10mA	$-V_{CE(sat)}$	-	0.25	V
Base Emitter On Voltage at $-I_C$=100mA, $-V_{CE}$=1V	$-V_{BE(on)}$	-	1.2	V
Current Gain – Bandwidth Product at $-I_C$=100mA, $-V_{CE}$=1V, f=100MHz	f_T	50	-	MHz

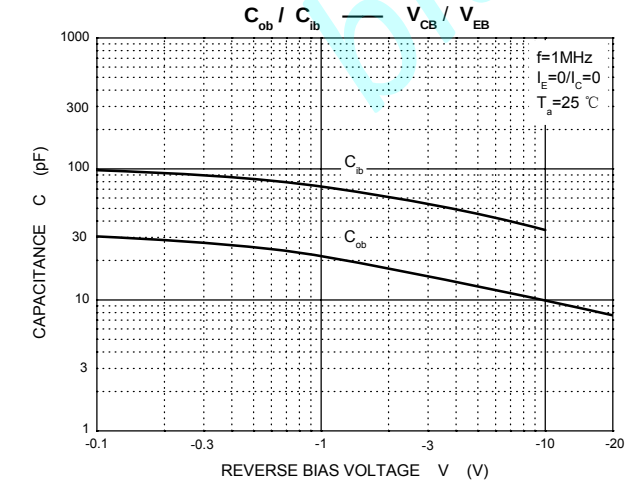
Typical Characteristics

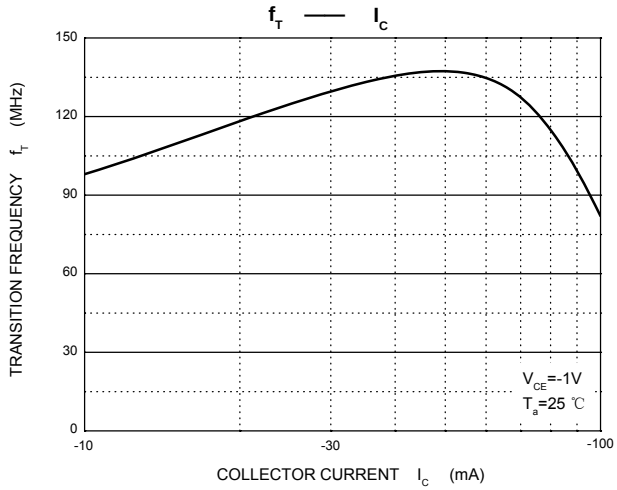






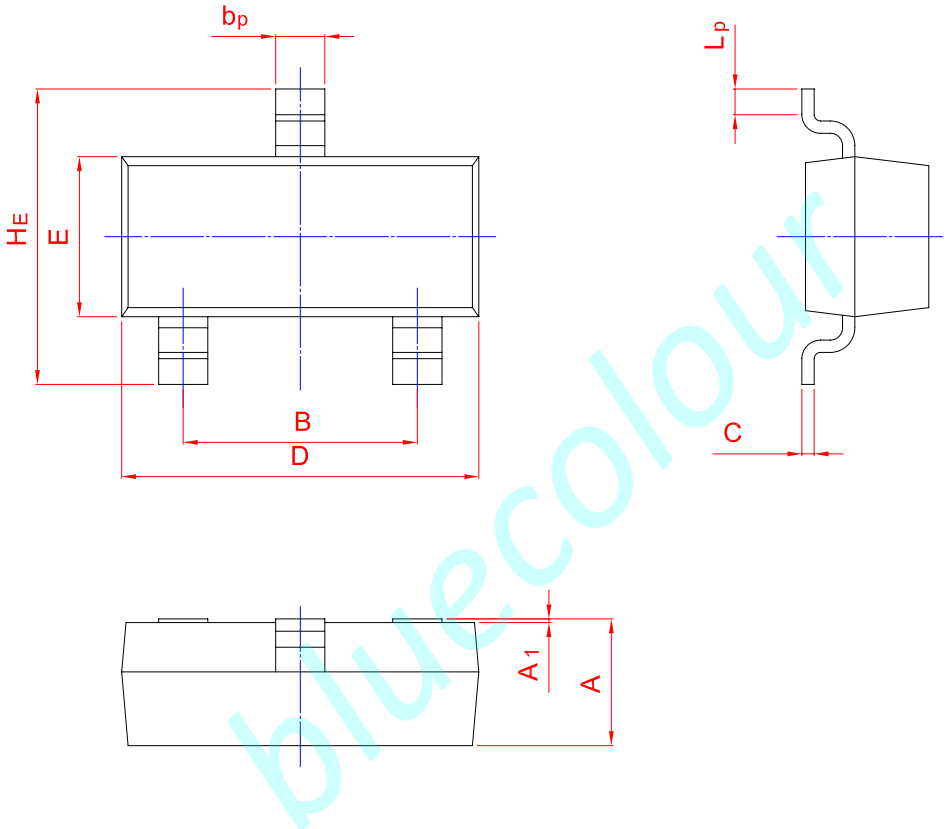






PACKAGE OUTLINE

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



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