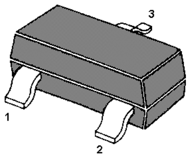
MMBTSA1162

PNP Silicon Epitaxial Planar Transistor

for AF general purpose amplifier applications.

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



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

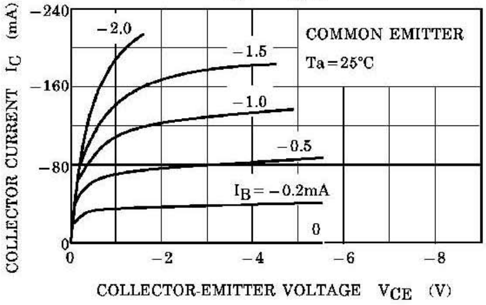
Absolute Maximum Ratings ($T_a = 25\ ^\circ C$)

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	50	V
Collector Emitter Voltage	$-V_{CEO}$	50	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	150	mA
Base Current	$-I_B$	30	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_{stg}	- 55 to + 125	°C

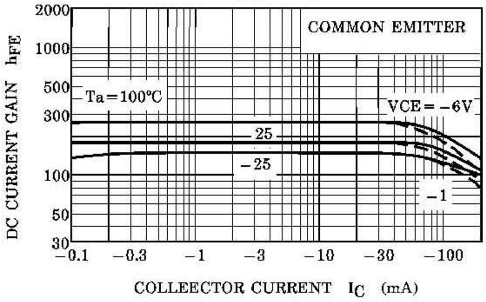
Characteristics at $T_a = 25\ ^\circ C$

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $-V_{CE} = 6$ V, $-I_C = 2$ mA Current Gain Group O	h_{FE}	70	140	-
Y	h_{FE}	120	240	-
G	h_{FE}	200	400	-
Collector Base Cutoff Current at $-V_{CB} = 50$ V	$-I_{CBO}$	-	0.1	µA
Emitter Base Cutoff Current at $-V_{EB} = 5$ V	$-I_{EBO}$	-	0.1	µA
Collector Base Breakdown Voltage at $-I_C = 100$ µA	$-V_{(BR)CBO}$	50	-	V
Collector Emitter Breakdown Voltage at $-I_C = 10$ mA	$-V_{(BR)CEO}$	50	-	V
Emitter Base Breakdown Voltage at $-I_E = 10$ µA	$-V_{(BR)EBO}$	5	-	V
Collector Emitter Saturation Voltage at $-I_C = 100$ mA, $-I_B = 10$ mA	$-V_{CE(sat)}$	-	0.3	V
Gain Bandwidth Product at $-V_{CE} = 10$ V, $-I_C = 1$ mA	f_T	80	-	MHz
Collector Output Capacitance at $-V_{CB} = 10$ V, f = 1 MHz	C_{ob}	-	7	pF

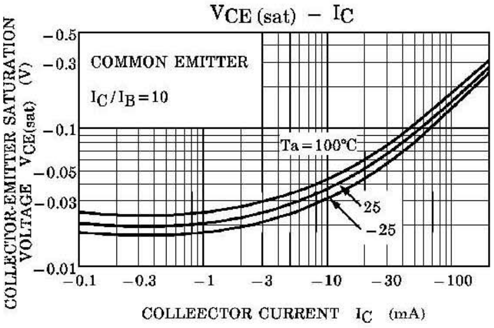
I_C – V_{CE}



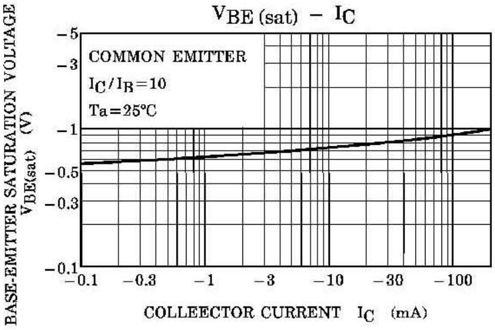
h_{FE} – I_C



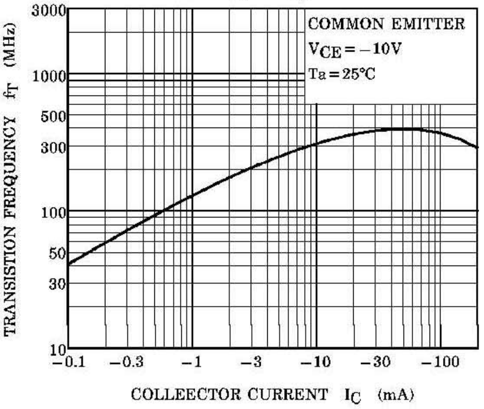
V_{CE} (sat) – I_C



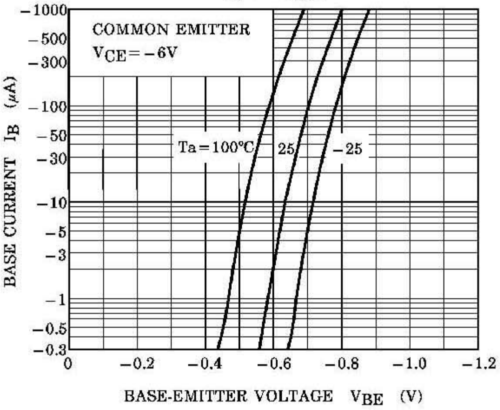
V_{BE} (sat) – I_C



f_T – I_C



I_B – V_{BE}



P_C – Ta