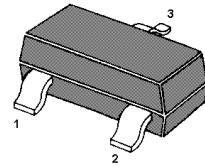


MMBTSA1182

PNP Silicon Epitaxial Planar Transistor

for low frequency power amplifier applications

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



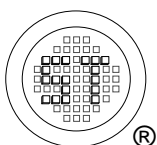
1.BASE 2.EMITTER 3.COLLECTOR
TO-236 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	35	V
Collector Emitter Voltage	$-V_{CEO}$	30	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	500	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 $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $-V_{CE} = 1\text{ V}$, $-I_C = 100\text{ mA}$ at $-V_{CE} = 6\text{ V}$, $-I_C = 400\text{ mA}$	O Y h_{FE}	70 120 25	- - -	140 240 -	- - -	
	Collector Cutoff Current at $-V_{CB} = 35\text{ V}$	$-I_{CBO}$	-	-	0.1	μA
	Emitter Cutoff Current at $-V_{EB} = 5\text{ V}$	$-I_{EBO}$	-	-	0.1	μA
Collector Emitter Saturation Voltage at $-I_C = 100\text{ mA}$, $-I_B = 10\text{ mA}$	$-V_{CE(sat)}$	-	-	0.25	V	
Base Emitter On Voltage at $-V_{CE} = 1\text{ V}$, $-I_C = 100\text{ mA}$	$-V_{BE(on)}$	-	-	1	V	
Transition Frequency at $-V_{CE} = 6\text{ V}$, $-I_C = 20\text{ mA}$	f_T	-	200	-	MHz	
Collector Output Capacitance at $-V_{CB} = 6\text{ V}$, $f = 1\text{ MHz}$	C_{ob}	-	13	-	pF	



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Dated : 16/03/2015 Rev: 01

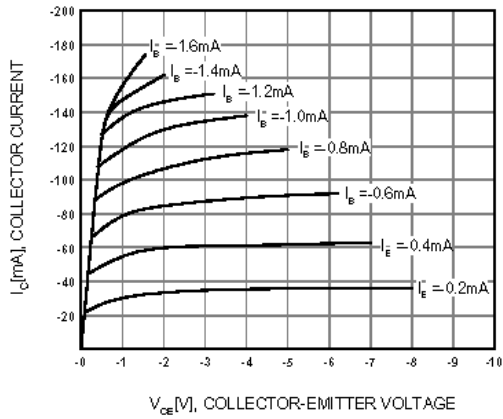


Figure 1. Static Characteristic

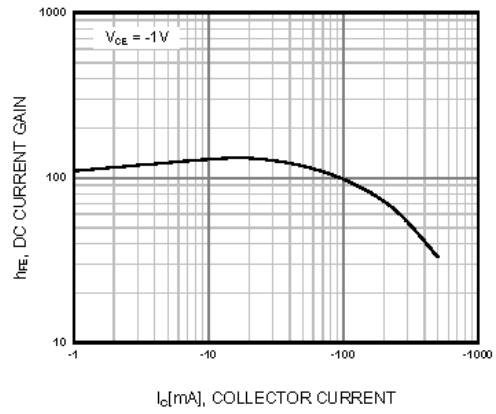


Figure 2. DC current Gain

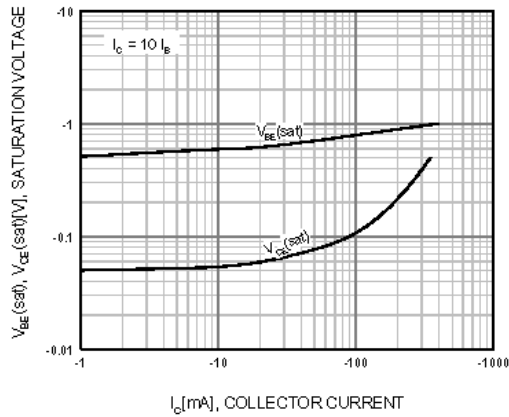


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

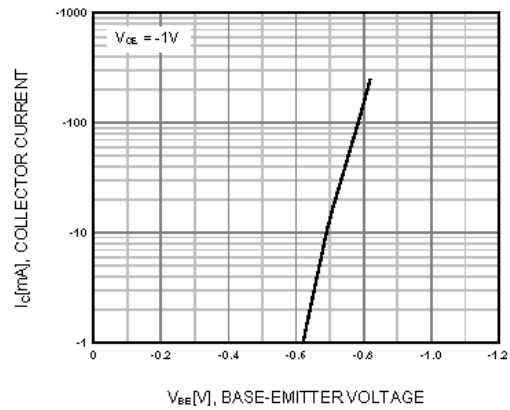


Figure 4. Base-Emitter On Voltage

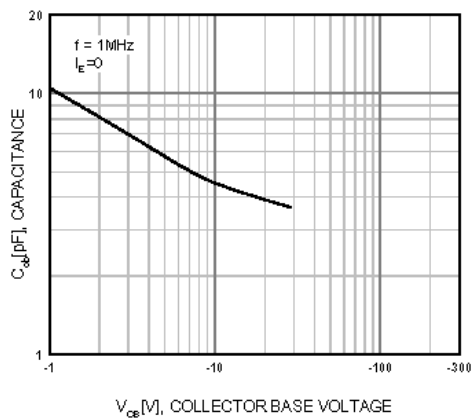
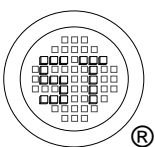


Figure 5. Collector Output Capacitance



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