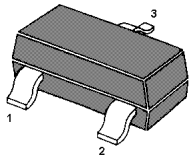
2SA1182

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
SOT-23 Plastic Package

Absolute Maximum Ratings (T_a = 25 °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	°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 $-V_{CE}$ = 1 V, $-I_C$ = 100 mA	O	h_{FE}	70	-	140	-
	Y	h_{FE}	120	-	240	-
at $-V_{CE}$ = 6 V, $-I_C$ = 400 mA		h_{FE}	25	-	-	-
Collector Cutoff Current at $-V_{CB}$ = 35 V		$-I_{CBO}$	-	-	0.1	µA
Emitter Cutoff Current at $-V_{EB}$ = 5 V		$-I_{EBO}$	-	-	0.1	µA
Collector Emitter Saturation Voltage at $-I_C$ = 100 mA, $-I_B$ = 10 mA		$-V_{CE(sat)}$	-	-	0.25	V
Base Emitter On Voltage at $-V_{CE}$ = 1 V, $-I_C$ = 100 mA		$-V_{BE(on)}$	-	-	1	V
Transition Frequency at $-V_{CE}$ = 6 V, $-I_C$ = 20 mA		f_T	-	200	-	MHz
Collector Output Capacitance at $-V_{CB}$ = 6 V, f = 1 MHz		C_{ob}	-	13	-	pF

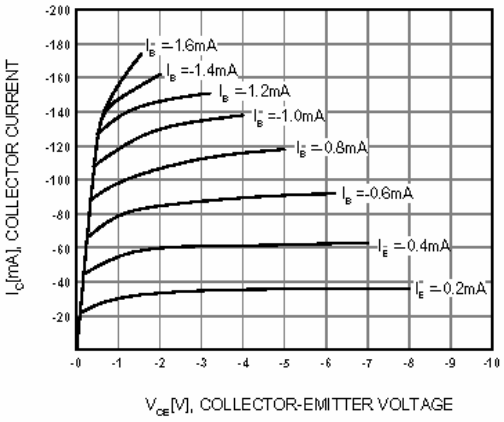


Figure 1. Static Characteristic

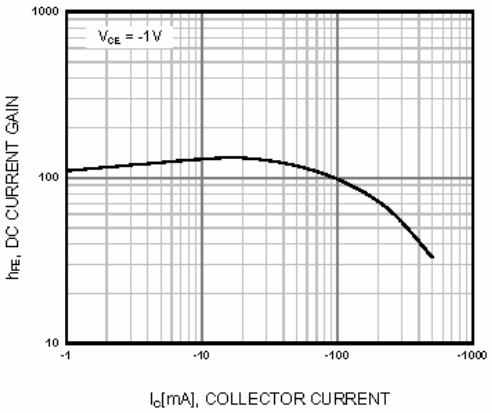


Figure 2. DC current Gain

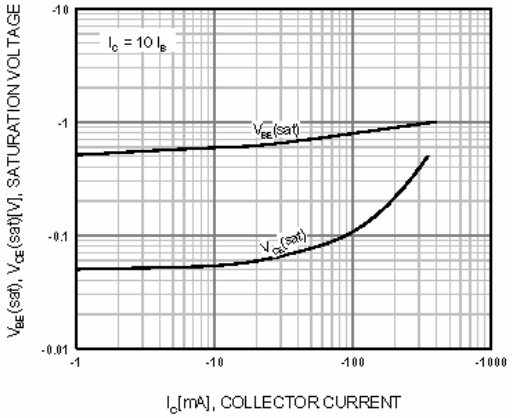


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

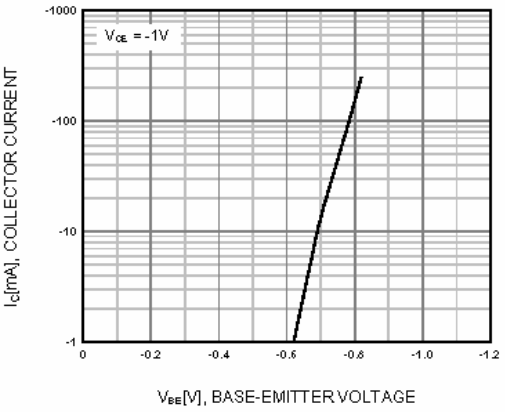


Figure 4. Base-Emitter On Voltage

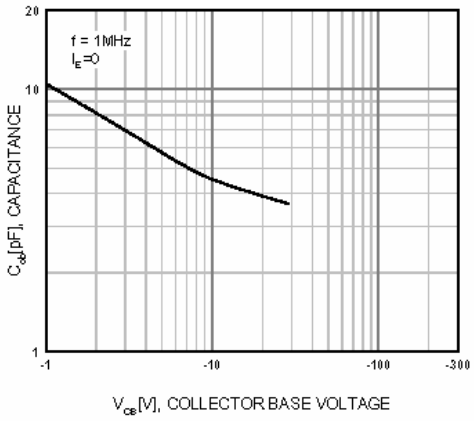


Figure 5. Collector Output Capacitance