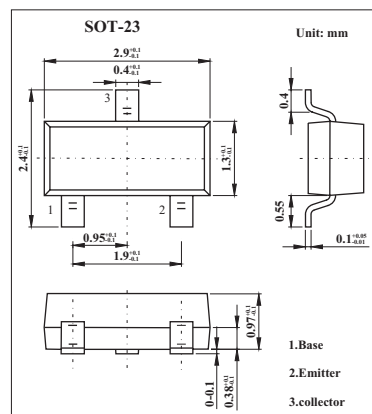


## 2SA1182

### ■ Features

- SOT-23 package



### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V <sub>CB0</sub>	-35	V
Collector-emitter voltage	V <sub>CEO</sub>	-30	V
Emitter-base voltage	V <sub>EB0</sub>	-5	V
Collector current	I <sub>C</sub>	-500	mA
Base current	I <sub>B</sub>	-50	mA
Collector power dissipation	P <sub>C</sub>	150	mW
Junction temperature	T <sub>J</sub>	125	°C
Storage temperature range	T <sub>stg</sub>	-55 to +125	°C

### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> = -35 V, I <sub>E</sub> = 0			-0.1	μ A
Emitter cut-off current	I <sub>EB0</sub>	V <sub>EB</sub> = -5 V, I <sub>C</sub> = 0			-0.1	μ A
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = -1 V, I <sub>C</sub> = -100 mA	70		240	
		V <sub>CE</sub> = -6 V, I <sub>C</sub> = -400 mA	25			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = -100 mA, I <sub>B</sub> = -10 mA		-0.1	-0.25	V
Base-emitter voltage	V <sub>BE</sub>	V <sub>CE</sub> = -1 V, I <sub>C</sub> = -100 mA		-0.8	-1.0	V
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -6 V, I <sub>E</sub> = 0, f = 1 MHz		13		pF
Transition frequency	f <sub>r</sub>	V <sub>CE</sub> = -6 V, I <sub>C</sub> = -20 mA		200		MHz

### ■ hFE Classification

Marking	ZO	ZY
Rank	O	Y
hFE	70~140	120~240

Typical Characteristics

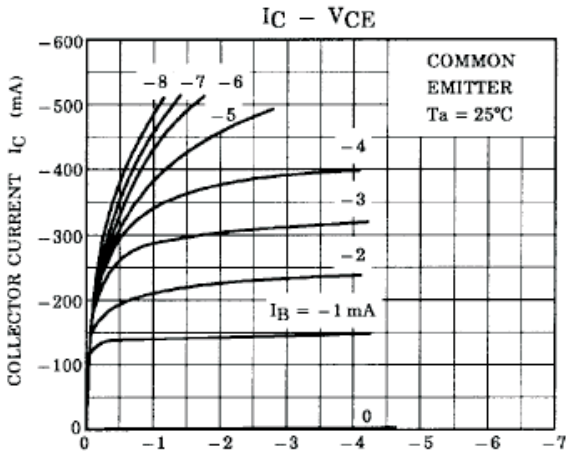


Fig. 1 Collector Emitter Voltage

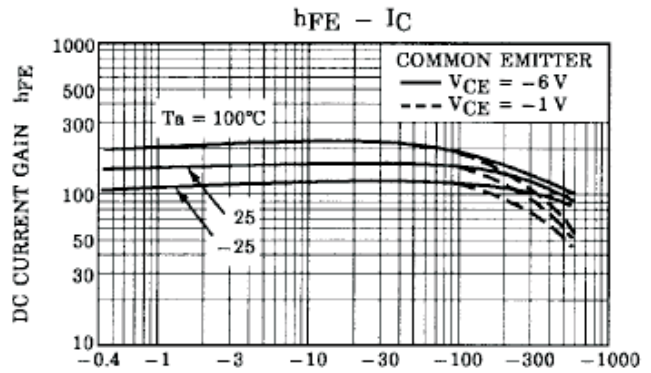


Fig.2 Collector Current

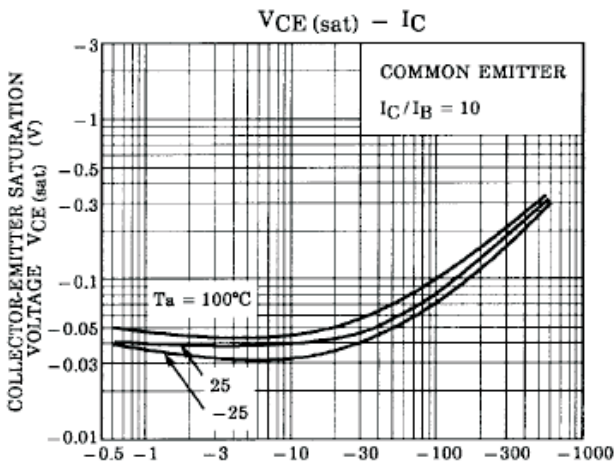


Fig.3 Collector Current

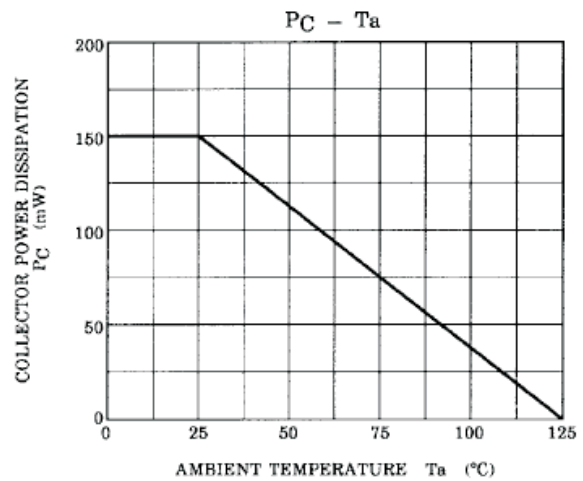


Fig.4 Ambient Temperature

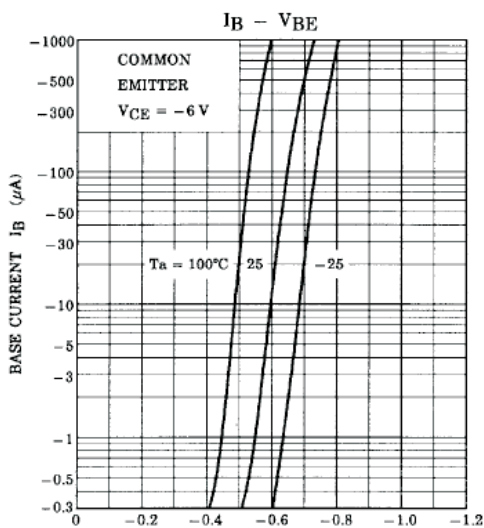


Fig.5 Base Emitter Voltage