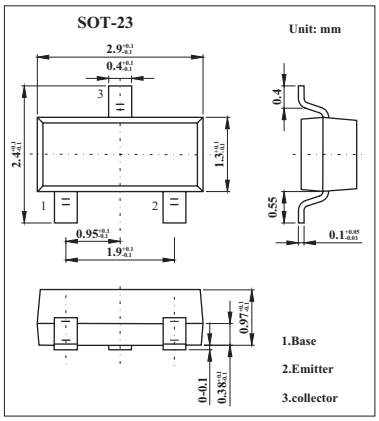
Silicon PNP Epitaxial Type Transistor

2SA1162



■ Features

- ●High voltage and high current: V_{CEO} = -50 V, I_C = ?150 mA (max)
- ●Low noise: NF = 1dB (typ.), 10dB (max)
- ●Small package

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	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
Collector power dissipation	P_C	150	mW
Junction temperature	Tj	125	℃
Storage temperature range	T_{stg}	-55 to +125	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cut-off current	I_{CBO}	V_{CB} = -50 V, I_E = 0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB} = -5 V, I_C = 0			-0.1	μA
DC current gain	h_{FE}	V_{CE} = -6 V, I_C = -2 mA	70		400	
Collector-emitter saturation voltage	$V_{CE\ (sat)}$	I_C = -100 mA, I_B = -10 mA		-0.1	-0.3	V
Collector output capacitance	C_{ob}	V_{CB} = -10 V, I_E = 0, f = 1 MHz		4	7	pF
Noise figure	NF	V_{CE} = -6 V, I_C = -0.1 mA, f = 1 kHz, Rg = 10 kΩ		1.0	10	dB
Transition frequency	f_T	V_{CE} = -10 V, I_C = -1 mA	80			MHz

■ h_{FE} Classification

Marking	SO	SY	SR
Rank	O	Y	GR
hFE	70～140	120～240	200～400

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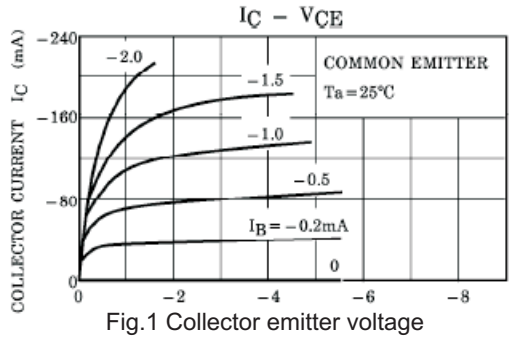

Fig.1 Collector emitter voltage

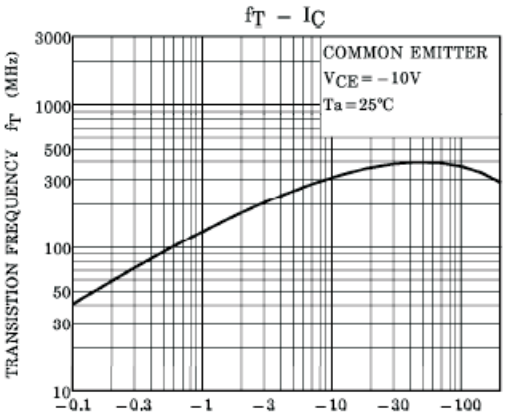

Fig.2 Collector current

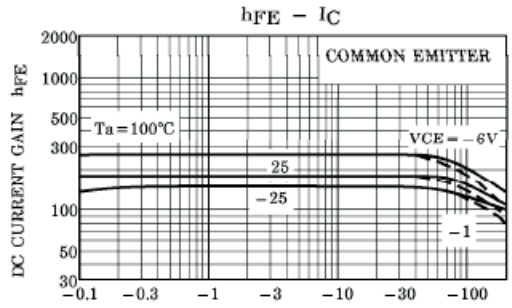

Fig.3 Collector current

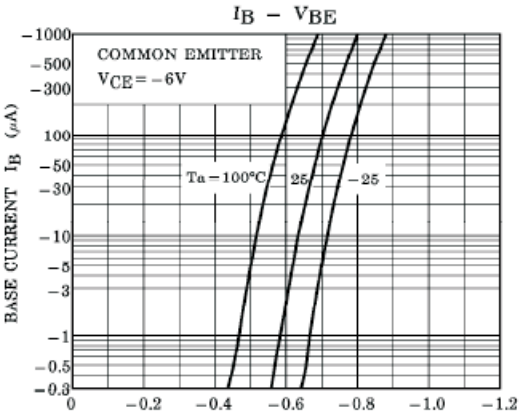

Fig.5 Base emitter voltage

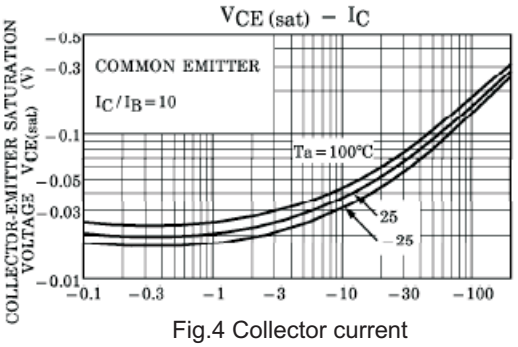

Fig.4 Collector current

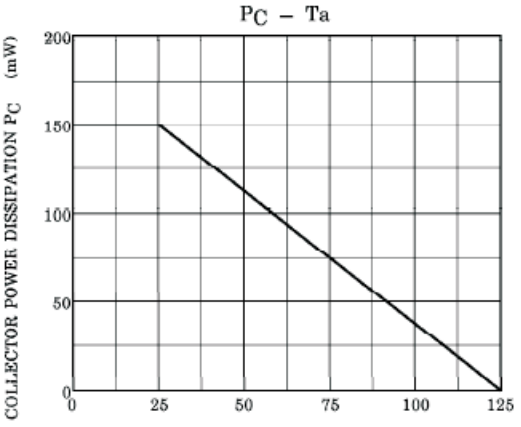

Fig.7 Ambient temperature

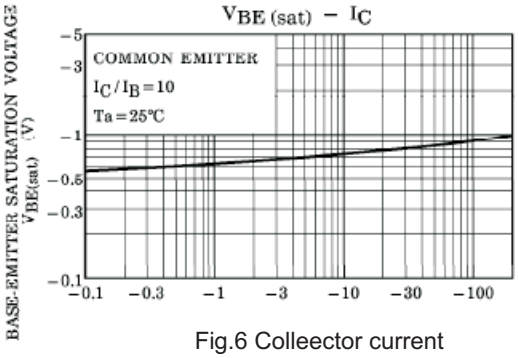

Fig.6 Colleector current