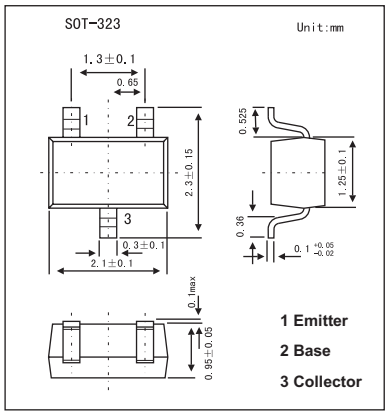
Silicon NPN Epitaxial

2SC4117



Features

- High voltage
- High hFE
- Low noise
- Small package

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	120	V
Collector-emitter voltage	V_{CEO}	120	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	100	mA
Base current	I_B	20	mA
Collector power dissipation	P_C	100	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} = 120 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	200		700	
Collector-emitter saturation voltage	$V_{CE\ (sat)}$	I_C = 10 mA, I_B = 1 mA			0.3	V
Transition frequency	f_T	V_{CE} = 6 V, I_C = 1 mA		100		MHz
Collector output capacitance	C_{ob}	V_{CB} = 10 V, I_E = 0, f = 1 MHz		3.0		pF
Noise figure	NF	V_{CE}=6 V, I_C=0.1 mA, f=1kHz,R_G=10 KΩ		1.0	10	dB

h_{FE} Classification

Marking	DG	DL
Rank	GR	BL
hFE	200～400	350～700