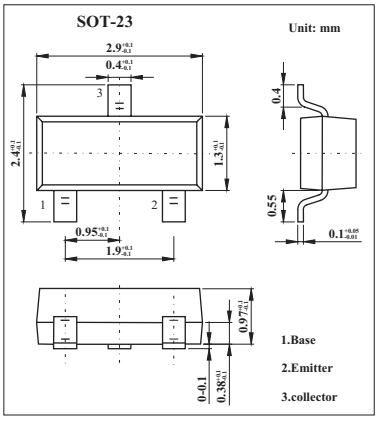
Silicon PNP Epitaxial Type

2SA1163



■ Features

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

■ 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	150	mW
Junction temperature	T_j	125	℃
Storage temperature	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		4		pF
Noise figure	NF	V_{CB}=-6 V, I_C=-0.1 mA, f=1 kHz,R_g=10 kΩ		1.0	10	dB

■ h_{FE} Classification

Marking	CG	CL
Rank	GR	BL
hFE	200～400	350～700