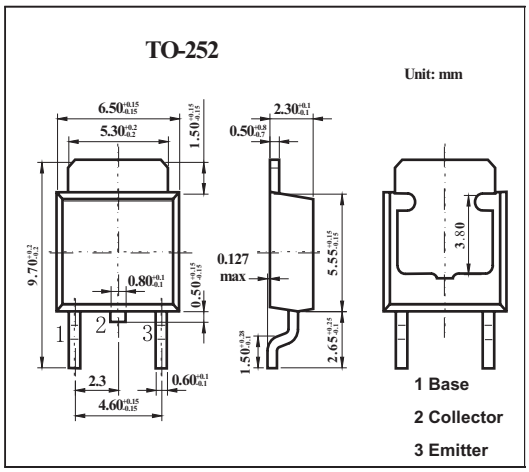
Silicon PNP Epitaxial Planar Type

2SB930A



■ Features

- High forward current transfer ratio hFE which has satisfactory linearity.
- Low collector-emitter saturation voltage $V_{CE(sat)}$.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-80	V
Collector-emitter voltage	V_{CEO}	-80	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-4	A
Peak collector current	I_{CP}	-8	A
Collector power dissipation	P_C	1.3	W
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-emitter voltage	V_{CEO}	I_C = -30 mA, I_B = 0	-80			V
Collector cutoff curent	I_{CES}	V_{CE} = -80 V,V_{BE} = 0			-400	μA
	I_{CEO}	V_{CE} = -60 V,I_B = 0			-700	μA
Emitter-base cutoff current	I_{EBO}	V_{EB} = -5 V, I_C = 0			-1	mA
Forward current transfer ratio	h_{FE}	V_{CE} = -4 V, I_C = -1 A	70		250	
		V_{CE} = -4 V, I_C = -3 A	15			
Base to emitter voltage	V_{BE}	V_{CE} = -4 V, I_C = -3 A			-2	V
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = -4 A, I_B = -0.4 A			-1.5	V
Transition frequency	f_T	V_{CE} = -10 V, I_C = -0.5 A , f = 10 MHz		20		MHz
Turn-on time	t_{on}	I_C = -4 A,I_{B1} = -0.4 A,I_{B2} = 0.4 A, V_{CC} = -50 V		0.2		μs
Storage time	t_{stg}			0.5		μs
Fall time	t_f			0.2		μs

■ h_{FE} Classification

Rank	Q	P
h_{FE}	70～150	120～250