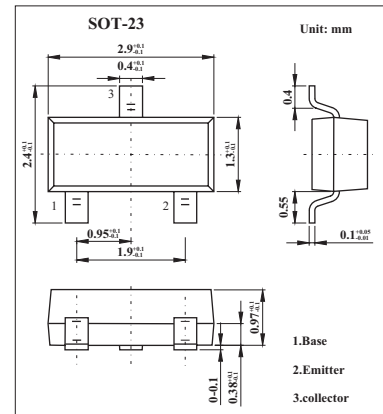


Silicon PNP Epitaxial

2SA1298

■ Features

- High DC current gain: $h_{FE} = 100 \sim 320$
- Low saturation voltage: $V_{CE(sat)} = -0.4V(\text{max})$
($I_C = -500 \text{ mA}$, $I_B = -20 \text{ mA}$)
- Suitable for driver stage of small motor
- Small package

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-30	V
Collector-emitter voltage	V_{CEO}	-25	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-800	mA
Base current	I_B	-160	mA
Collector power dissipation	P_C	200	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cut-off current	I_{CBO}	$V_{CB} = -30 \text{ V}$, $I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -50 \text{ V}$, $I_C = 0$			-0.1	μA
Collector-emitter breakdown voltage	$V_{(BR) CEO}$	$I_C = -10 \text{ mA}$, $I_B = 0$	-25			V
Emitter-base breakdown voltage	$V_{(BR) EBO}$	$I_E = -0.1 \text{ mA}$, $I_C = 0$	-5			V
DC current gain	h_{FE}	$V_{CE} = -1 \text{ V}$, $I_C = -100 \text{ mA}$	100		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500 \text{ mA}$, $I_B = -20 \text{ mA}$			-0.4	V
Base-emitter voltage	V_{BE}	$V_{CE} = -1 \text{ V}$, $I_C = -10 \text{ mA}$	-0.5		-0.8	V
Transition frequency	f_T	$V_{CE} = -5 \text{ V}$, $I_C = -10 \text{ mA}$		120		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10 \text{ V}$, $I_E = 0$, $f = 1 \text{ MHz}$		13		pF

■ h_{FE} Classification

Marking	IO	IY
h_{FE}	100~200	160~320