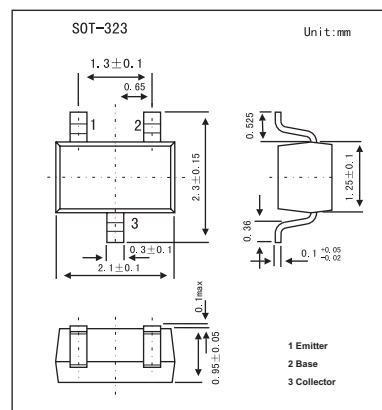


## Silicon PNP Epitaxial

## 2SA1588

## ■ Features

- Excellent hFE linearity.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	-35	V
Collector-emitter voltage	$V_{CEO}$	-30	V
Emitter-base voltage	$V_{EBO}$	-5	V
Collector current	$I_C$	-500	mA
Base current	$I_B$	-50	mA
Collector power dissipation	$P_C$	100	mW
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature range	$T_{stg}$	-55 to +125	$^\circ\text{C}$

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

Parameter	Symbol		Min	Typ	Max	Unit
Collector cut-off current	$I_{CBO}$	$V_{CB}=-35\text{V}, I_E=0$			-0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=-5\text{V}, I_C=0$			-0.1	$\mu\text{A}$
DC current gain	hFE	$V_{CE}=-1\text{V}, I_C=-100\text{mA}$	70		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-100\text{mA}, I_B=-10\text{mA}$		-0.1	-0.3	V
Transition frequency	$f_T$	$V_{CE}=-1\text{V}, I_C=-100\text{mA}$	80			MHz
Collector output capacitance	$C_{ob}$	$V_{CE}=-6\text{V}, I_C=-20\text{mA}$		4	7	pF
Noise figure	NF	$V_{CB}=-6\text{V}, I_E=0, f=1\text{MHz}$		1.0	10	dB

## ■ hFE Classification

Marking	ZO	ZY
hFE	70~140	120~240