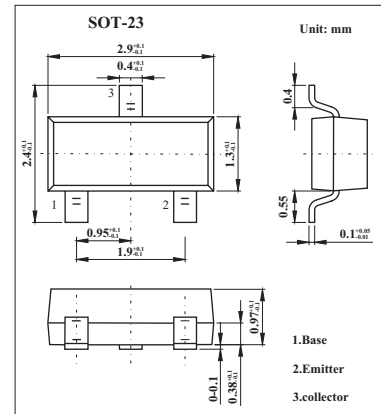


## Silicon NPN Epitaxial

## 2SC3326

## ■ Features

- High emitter-base voltage:  $V_{EBO} = 25 \text{ V (min)}$ .
- High reverse  $h_{FE}$ : Reverse  $h_{FE} = 150 \text{ (typ.)}$  ( $V_{CE} = -2 \text{ V}$ ,  $I_C = -4 \text{ mA}$ ).
- Low on resistance:  $R_{ON} = 1 \ \Omega \text{ (typ.)}$  ( $I_B = 5 \text{ mA}$ ).
- High DC current gain:  $h_{FE} = 200 \sim 1200$ .
- Small package.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	50	V
Collector-emitter voltage	$V_{CEO}$	20	V
Emitter-base voltage	$V_{EBO}$	25	V
Collector current	$I_C$	300	mA
Base current	$I_B$	60	mA
Collector power dissipation	$P_C$	150	mW
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature range	$T_{stg}$	-55 to +125	$^\circ\text{C}$

## 2SC3326

## ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit	
Collector cut-off current	ICBO	V <sub>CB</sub> = 50 V, I <sub>E</sub> = 0			0.1	μA	
Emitter cut-off current	IEBO	V <sub>EB</sub> = 25 V, I <sub>C</sub> = 0			0.1	μA	
DC current gain	hFE	V <sub>CE</sub> = 2 V, I <sub>C</sub> = 4 mA	200		1200		
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = 30 mA, I <sub>B</sub> = 3 mA		0.042	0.1	V	
Base-emitter voltage	V <sub>BE</sub>	V <sub>CE</sub> = 2 V, I <sub>C</sub> = 4 mA		0.61		V	
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = 6 V, I <sub>C</sub> = 4 mA		30		MHz	
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 10 V, I <sub>E</sub> = 0, f = 1 MHz		4.8	7	pF	
Switchingtime Turn-on time	t <sub>on</sub>	<p>Duty cycle ≤ 2%</p>		160		ns	
Storage time	t <sub>stg</sub>				500		ns
Fall time	t <sub>f</sub>				130		ns

## ■ hFE Classification

Marking	CC	
	A	B
hFE	200~700	350~120