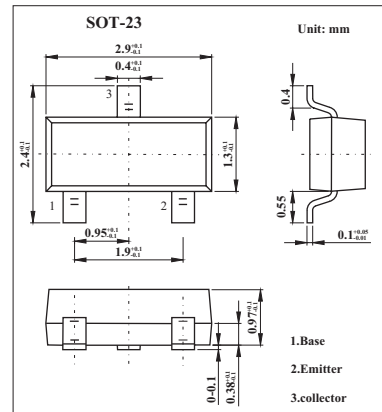


# 2SC3437

## ■ Features

- High transition frequency:  $f_T = 400$  MHz (typ).
- Low saturation voltage:  $V_{CE(sat)} = 0.3$  V (max).
- High speed switching time:  $t_{stg} = 15$  ns (typ).

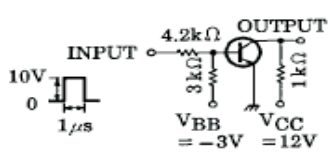


## ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	40	V
Collector-emitter voltage	$V_{CEO}$	15	V
Emitter-base voltage	$V_{EBO}$	5	V
Collector current	$I_C$	200	mA
Base current	$I_B$	40	mA
Collector power dissipation	$P_C$	150	mW
Junction temperature	$T_J$	125	$^\circ\text{C}$
Storage temperature range	$T_{stg}$	-55 to +125	$^\circ\text{C}$

## 2SC3437

### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit	
Collector cut-off current	IcBO	V <sub>CB</sub> = 40 V, I <sub>E</sub> = 0			0.1	μA	
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = 5 V, I <sub>C</sub> = 0			0.1	μA	
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = 1 V, I <sub>C</sub> = 10 mA	40		240		
Collector-emitter saturation voltage	V <sub>CE (sat)</sub>	I <sub>C</sub> = 20 mA, I <sub>B</sub> = 1 mA			0.3	V	
Base-emitter saturation voltage	V <sub>BE (sat)</sub>	I <sub>C</sub> = 20 mA, I <sub>B</sub> = 1 mA			1.0	V	
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = 10 V, I <sub>C</sub> = 10 mA	200	400		MHz	
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 10 V, I <sub>E</sub> = 0, f = 1 MHz		4	6	pF	
Turn-on time	t <sub>on</sub>	 <p>Duty cycle ≤ 2%</p>		70		ns	
Storage time	t <sub>stg</sub>				15		ns
Fall time	t <sub>f</sub>				30		ns

### ■ hFE Classification

Marking	CH		
	R	O	Y
hFE	40~80	70~140	120~240