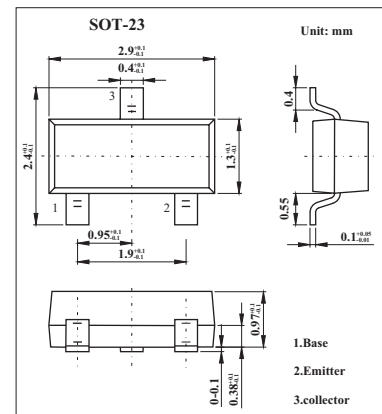


Silicon NPN Epitaxial

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 _{CB} = 40 V, I _E = 0			0.1	μA	
Emitter cut-off current	I _{EBO}	V _{EB} = 5 V, I _C = 0			0.1	μA	
DC current gain	h _{FE}	V _{CE} = 1 V, I _C = 10 mA	40		240		
Collector-emitter saturation voltage	V _{CE (sat)}	I _C = 20 mA, I _B = 1 mA			0.3	V	
Base-emitter saturation voltage	V _{BE (sat)}	I _C = 20 mA, I _B = 1 mA			1.0	V	
Transition frequency	f _T	V _{CE} = 10 V, I _C = 10 mA	200	400		MHz	
Collector output capacitance	C _{ob}	V _{CB} = 10 V, I _E = 0, f = 1 MHz		4	6	pF	
Turn-on time	t _{on}			70		ns	
Storage time	t _{stg}				15		ns
Fall time	t _f				30		ns

■ hFE Classification

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