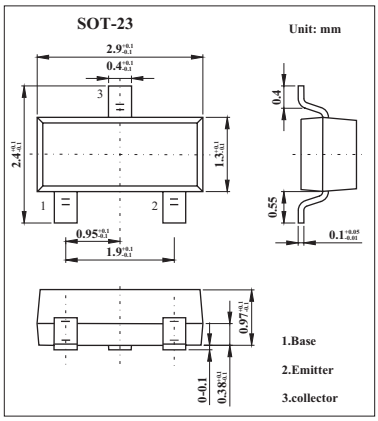
Silicon NPN Epitaxial

2SC2714



■ Features

- Small reverse transfer capacitance: Cre = 0.7 pF (typ.)
- Low noise figure: NF = 2.5dB (typ.) (f = 100 MHz)

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	40	V
Collector-emitter voltage	V_{CEO}	30	V
Emitter-base voltage	V_{EBO}	4	V
Collector current	I_C	20	mA
Emitter current	I_E	4	mA
Collector power dissipation	P_C	100	mW
Junction temperature	Tj	125	℃
Storage temperature range	T_{stg}	-55 to +125	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cut-off current	I_{CBO}	V_{CB} = 18 V, I_E = 0			0.5	μA
Emitter cut-off current	I_{EBO}	V_{EB} = 4 V, I_C = 0			0.5	μA
DC current gain	h_{FE}	V_{CE} = 6 V, I_C = 1 mA	40		200	
Reverse transfer capacitance	Cre	V_{CB} = 6 V, f = 1 MHz		0.70		pF
Transition frequency	f_T	V_{CE} = 6 V, I_C = 1 mA		550		MHz
Collector-base time constant	Cc.rbb'				30	ps
Noise figure	NF	V_{CE} = 6 V, I_E = -1 mA, f = 100 MHz,		2.5	5.0	dB
Power gain	G_{pe}		17	23		dB

■ h_{FE} Classification

Marking	QR	QO	QY
Rank	R	O	Y
hFE	40～80	70～140	100～200