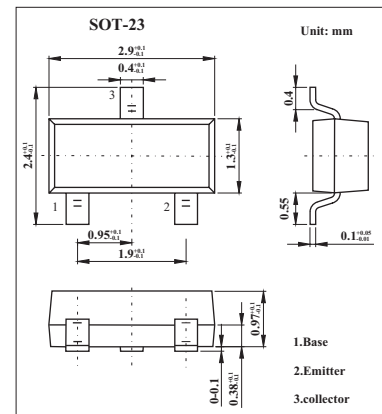


Silicon NPN Epitaxial

2SC2996

■ Features

- High stability oscillation voltage on FM local oscillator.
- Recommend FM/AM RF, MIX, local and IF.



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	40	V
Collector-emitter voltage	V _{CEO}	30	V
Emitter-base voltage	V _{EB0}	4	V
Collector current	I _C	50	mA
Emitter current	I _E	-50	mA
Collector power dissipation	P _C	150	mW
Junction temperature	T _j	125	°C
Storage temperature range	T _{stg}	-55 to +125	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cut-off current	I _{CBO}	V _{CB} = 40 V, I _E = 0			0.1	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		240	
Reverse transfer capacitance	C _{re}	V _{CB} = 6 V, f = 1 MHz		0.9	1.3	pF
Transition frequency	f _T	V _{CE} = 6 V, I _C = -1 mA	150	350		MHz
Collector-base time constant	C _{cerbb}	V _{CE} = 6 V, I _E = -1 mA, f = 30 MHz		15	30	ps
Noise figure	NF	V _{CE} = 6 V, I _E = -1 mA, f = 100 MHz		4.0		dB
Power gain	G _{pe}			15		dB
Oscillation output voltage	V _{osc}	V _{CE} = 6 V, f = 100 MHz		150		mV

■ hFE Classification

Marking	GR	GO	GY
hFE	40~80	70~140	120~240