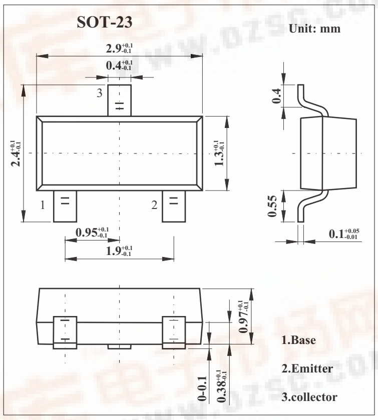
Silicon NPN Epitaxial

2SC2996



■ Features

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

■ Absolute Maximum Ratings Ta = 25℃

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	50	mA
Emitter current	I_E	-50	mA
Collector power dissipation	P_C	150	mW
Junction temperature	Tj	125	℃
Storage temperature range	Tstg	-55 to +125	℃

■ Electrical Characteristics Ta = 25℃

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} = 6V , I_C = 1mA	40		240	
Reverse transfer capacitance	C_{re}	V_{CB} = 6V , f = 1 MHz		0.9	1.3	pF
Transition frequency	f_T	V_{CE} = 6V, I_C = -1 mA	150	350		MHz
Collector-base time constant	$C_c r_{bb'}$	V_{CE} = 6 V, I_E = -1mA, f = 30 MHz		15	30	ps
Noise figure	NF	V_{CE} = 6 V, I_E = -1mA, f = 100 MHz		4.0		dB
Power gain	Gpe			15		dB
Oscillation output voltage	V_{OSC}	V_{CE} = 6 V,f = 100 MHz		150		mV

■ h_{FE} Classification

Marking	GR	GO	GY
h_{FE}	40～80	70～140	120～240