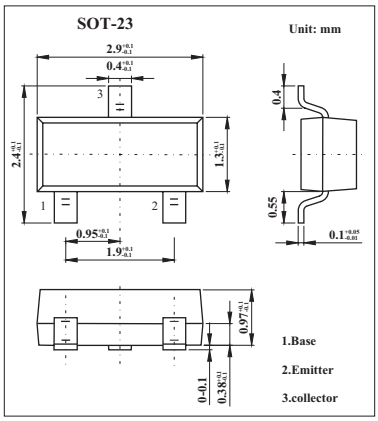
Silicon NPN Epitaxial

2SC2736



■ Features

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■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	30	V
Collector-emitter voltage	V_{CEO}	20	V
Emitter-base voltage	V_{EBO}	3	V
Collector current	I_C	50	mA
Collector power dissipation	P_C	150	mW
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C = 10μA , I_E = 0	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C = 1mA , R_{BE} = ∞	20			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E = 10μA , I_C = 0	3			V
Collector cutoff current	I_{CBO}	V_{CB} = 15V, I_C = 0			500	nA
Collector to emitter saturation voltage	$V_{CE(sat)}$	I_C = 10 mA, I_B = 5 mA			0.7	V
DC current transfer ratio	h_{FE}	V_{CE} = 10 V, I_C = 5 mA	30		200	
Collector output capacitance	C_{ob}	V_{CB} = 10 V, I_E = 0, f = 1 MHz			1.0	pF
Gain bandwidth product	f_T	V_{CE} = 10 V, I_C = 5 MA	1400	2200		MHz
Conversion gain	CG1	V_{CC} = 12 V, I_C = 2 mA,f = 200 MHz, f_{OSC} = 230 MHz (0dBm)		22.5		dB
	CG2	V_{CC} = 12 V, IC = 2 mA,f = 900 MHz, f_{OSC} = 930 MHz (0dBm),fOut = 30 MHz		10		dB
Noise figure	NF	V_{CC} = 12 V, I_C = 2 mA, f = 200 MHz, f_{OSC} = 230 MHz (0dBm)		4.0		dB
Oscillating output voltage	V_{OSC1}	V_{CC} = 12 V, I_C = 7 mA, f = 300 MHz		300		mV
	V_{OSC2}	V_{CC} = 12 V, I_C = 7 mA, f_{OSC} = 930 MHz		200		mV

■ Marking

Marking	TC