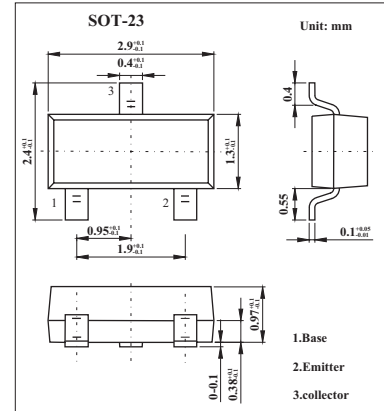


Silicon NPN Epitaxial

2SC2732

■ Features

- UHF frequency converter

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	30	V
Collector-emitter voltage	V_{CEO}	25	V
Emitter-base voltage	V_{EBO}	4	V
Collector current	I_C	20	mA
Collector power dissipation	P_C	150	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 10\mu\text{A}$, $I_E = 0$	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1\text{mA}$, $R_{BE} = \infty$	25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 10\mu\text{A}$, $I_C = 0$	4			V
Collector cutoff current	I_{CBO}	$V_{CB} = 10\text{V}$, $I_C = 0$			0.5	μA
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 10\text{mA}$, $I_B = 1\text{mA}$			5	V
DC current transfer ratio	h_{FE}	$V_{CE} = 10\text{V}$, $I_C = 3\text{mA}$	30	60		
Gain bandwidth product	f_T	$V_{CE} = 10\text{V}$, $I_C = 5\text{mA}$	700	1000		MHz
Collector output capacitance	C_{ob}	$V_{CB} = 10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$		0.5	0.8	pF
Conversion gain	CG	$V_{CC} = 12\text{V}$, $I_C = 1\text{mA}$, $f = 900\text{MHz}$, $f_{osc} = 930\text{MHz}$ (0dBm), $f = 30\text{MHz}$		7.0		dB
Noise figure	NF	$V_{CC} = 12\text{V}$, $I_C = 1\text{mA}$, $f = 900\text{MHz}$, $f_{osc} = 930\text{MHz}$ (0dBm), $f_{out} = 30\text{MHz}$		10.0		dB

■ Marking

Marking	EC