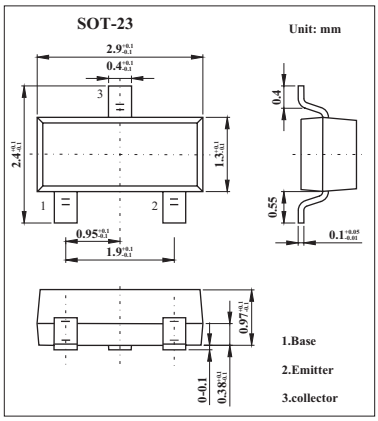
Silicon NPN Epitaxial

2SC2732



■ Features

●UHF frequency converter

■ Absolute Maximum Ratings Ta = 25℃

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

■ Marking

Marking	EC