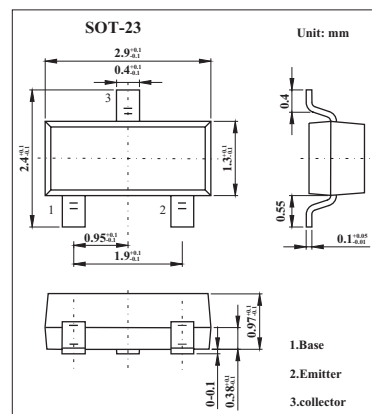


Silicon NPN Epitaxial

2SC3513



■ Features

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■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	15	V
Collector-emitter voltage	V _{CEO}	11	V
Emitter-base voltage	V _{EB0}	2	V
Collector current	I _c	500	mA
Collector power dissipation	P _c	150	mW
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector to base breakdown voltage	V _{(BR)CBO}	I _c = 10 mA, I _E = 0	15			V
Collector cutoff current	I _{CEO}	V _{CE} = 10 V, R _{BE} = ∞			1	μA
Emitter cutoff current	I _{EBO}	V _{EB} = 1 V, I _c = 0			1	μA
Collector cutoff current	I _{CBO}	V _{CB} = 12 V, I _E = 0			1	μA
DC current transfer ratio	h _{FE}	V _{CE} = 5 V, I _c = 20 mA	50	120	250	
Collector output capacitance	C _{ob}	V _{CB} = 5 V, I _E = 0, f = 1 MHz		1.0	1.5	pF
Gain bandwidth product	f _T	V _{CE} = 5 V, I _c = 20 mA		6.0		GHz
Power gain	PG	V _{CE} = 5 V, I _c = 20 mA, f = 900 MHz		10		dB
Noise figure	NF	V _{CE} = 5 V, I _c = 5 mA, f = 900 MHz		1.6		dB

■ Marking

Marking	IS-
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