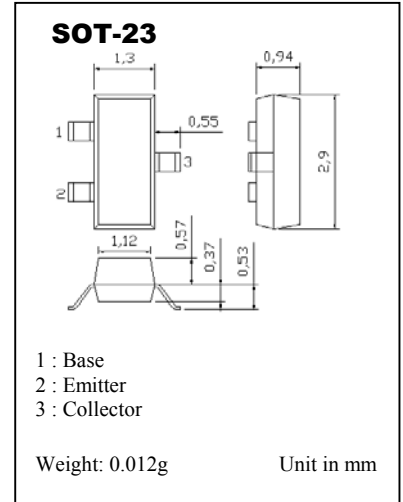


NPN SILICON EPITAXIAL TRANSISTOR

...designed for low noise amplifier at VHF, UHF and CATV band.

MAXIMUM RATINGS (Ta= 25 °C)

Characteristic	Symbol	Value	Unit
Collector Base Voltage	V _{CB0}	20	V
Collector Emitter Voltage	V _{CEO}	12	V
Emitter Base Voltage	V _{EBO}	3	V
Collector Current	I _c	100	mA
Total Power Dissipation	P _{tot}	200	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	-65 ~ 150	°C



ELECTRICAL CHARACTERISTICS (Ta= 25 °C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector Cutoff Current	I _{CBO}	V _{CB} = 10V, I _E = 0	-	-	1	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} = 1V, I _C = 0	-	-	1	μA
*DC Current Gain	h _{FE}	V _{CE} = 10V, I _C = 20mA	50	120	300	-
Transition Frequency	f _T	V _{CE} = 10V, I _C = 20mA	-	7	-	GHz
**Feed-Back Capacitance	C _{re}	V _{CB} = 10V, I _E = 0, f = 1MHz	-	0.55	1	pF
Insertion Power Gain	S _{21e} ²	V _{CE} = 10V, I _C = 20mA, f = 1GHz	-	11.5	-	dB
Noise Figure	NF	V _{CE} = 10V, I _C = 7mA, f = 1GHz	-	1.1	2	dB

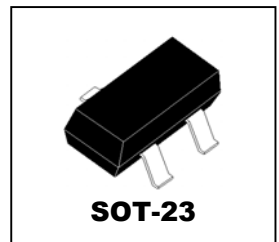
*Pulse measurement PW≤350μs, Duty Cycle≤2%

**The emitter terminal and the case shall be connected to the guard terminal of the three-terminal capacitance bridge.

**NPN SILICON
EPITAXIAL
TRANSISTOR**

CLASSIFICATIONS OF h_{FE}

Rank	R23	R24	R25
Range	50 to 100	80 to 160	125 to 250



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