

2SC1923

NPN Silicon Epitaxial Planar Transistor

for high frequency amplifier applications
FM, RF, MIX, IF amplifier applications.

The transistor is subdivided into three groups, R, O and Y, according to its DC current gain.

On special request, these transistors can be manufactured in different pin configurations.



1. Emitter 2. Collector 3. Base
TO-92 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	40	V
Collector Emitter Voltage	V_{CEO}	20	V
Emitter Base Voltage	V_{EBO}	4	V
Collector Current	I_C	20	mA
Base Current	I_B	4	mA
Power Dissipation	P_{tot}	100	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE} = 6\text{ V}$, $I_C = 1\text{ mA}$ Current Gain Group R O Y	h_{FE}	40	-	80	-
	h_{FE}	70	-	140	-
	h_{FE}	100	-	200	-
Collector Base Cutoff Current at $V_{CB} = 18\text{ V}$	I_{CBO}	-	-	500	nA
Emitter Base Cutoff Current at $V_{EB} = 4\text{ V}$	I_{EBO}	-	-	500	nA
Gain Bandwidth Product at $V_{CE} = 6\text{ V}$, $I_C = 1\text{ mA}$	f_T	-	550	-	MHz
Reverse Transfer Capacitance at $V_{CE} = 6\text{ V}$, $f = 1\text{ MHz}$	C_{re}	-	0.7	-	pF



