

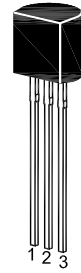
2SC2120

NPN Silicon Epitaxial Planar Transistor

for switching and AF amplifier applications.

The transistor is subdivided into two groups, 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 ($T_a = 25\text{ }^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	35	V
Collector Emitter Voltage	V_{CEO}	30	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	800	mA
Base Current	I_B	160	mA
Power Dissipation	P_{tot}	600	mW
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^{\circ}\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE} = 1\text{ V}$, $I_C = 100\text{ mA}$ at $V_{CE} = 1\text{ V}$, $I_C = 700\text{ mA}$ Current Gain Group O Y	h_{FE}	100	-	200	-
	h_{FE}	160	-	320	-
	h_{FE}	35	-	-	-
Collector Base Cutoff Current at $V_{CB} = 35\text{ V}$	I_{CBO}	-	-	0.1	μA
Emitter Base Cutoff Current at $V_{EB} = 5\text{ V}$	I_{EBO}	-	-	0.1	μA
Collector Emitter Breakdown Voltage at $I_C = 10\text{ mA}$	V_{CEO}	30	-	-	V
Collector Emitter Saturation Voltage at $I_C = 500\text{ mA}$, $I_B = 20\text{ mA}$	$V_{CE(sat)}$	-	-	0.5	V
Base Emitter Voltage at $I_C = 10\text{ mA}$, $V_{CE} = 1\text{ V}$	V_{BE}	0.5	-	0.8	V
Transition Frequency at $V_{CE} = 5\text{ V}$, $I_C = 10\text{ mA}$	f_T	-	120	-	MHz
Collector Output Capacitance at $V_{CB} = 10\text{ V}$, $f = 1\text{ MHz}$	C_{ob}	-	13	-	pF

