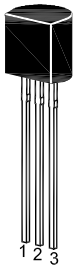
ST 2SC3876

NPN Silicon Epitaxial Planar Transistor
for switching and AF amplifier applications.

The transistor is subdivided into two groups, O and Y and 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 °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	500	mA
Base Current	I_B	50	mA
Power Dissipation	P_{tot}	150	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

Characteristics at T_a = 25 °C

Parameter			Symbol	Min.	Typ.	Max.	Unit
DC Current Gain							
at V_{CE} = 1 V, I_C = 100 mA	Current Gain Group	O	h_{FE}	70	-	140	-
		Y	h_{FE}	120	-	240	-
at V_{CE} = 6 V, I_C = 400 mA			h_{FE}	25	-	-	-
Collector Base Cutoff Current at V_{CB} = 35 V			I_{CBO}	-	-	0.1	µA
Emitter Base Cutoff Current at V_{EB} = 5 V			I_{EBO}	-	-	0.1	µA
Collector Emitter Saturation Voltage at I_C = 100 mA, I_B = 10 mA			$V_{CE(sat)}$	-	0.1	0.25	V
Base Emitter Voltage at I_C = 100 mA, V_{CE} = 1 V			V_{BE}	-	0.8	1	V
Transition Frequency at V_{CE} = 6 V, I_C = 20 mA			f_T	-	300	-	MHz
Collector Output Capacitance at V_{CB} = 6 V, f = 1 MHz			C_{ob}	-	7	-	pF