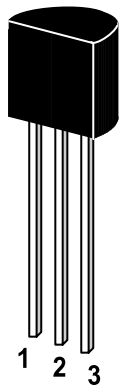
ST 2SC1213 / 2SC1213A

NPN Silicon Epitaxial Planar Transistor
Low frequency amplifier applications.

The transistor is subdivided into three groups, B, C and D, according to its DC current gain. As complementary type the PNP transistor ST 2SA673 and ST 2SA673A are recommended.

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



1. Emitter 2. Collector 3. Base

TO-92 Plastic Package
Weight approx. 0.19g

Absolute Maximum Ratings (T_a = 25 °C)

	Symbol	Value		Unit
		ST 2SC1213	ST 2SC1213A	
Collector Base Voltage	V_{CBO}	35	50	V
Collector Emitter Voltage	V_{CEO}	35	50	V
Emitter Base Voltage	V_{EBO}	4		V
Collector Current	I_C	500		mA
Power Dissipation	P_{tot}	400		mW
Junction Temperature	T_j	150		°C
Storage Temperature Range	T_S	-55 to +150		°C

Characteristics at T_{amb}=25 ^{O}C

		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain						
at I_C=10mA, V_{CE}=3V						
	B	h_{FE}	60	-	120	-
	C	h_{FE}	100	-	200	-
	D	h_{FE}	160	-	320	-
at I_C=500mA, V_{CE}=3V		h_{FE}	10	-	-	-
Collector Cutoff Current						
at V_{CB}=20V	ST 2SC1213	I_{CBO}	-	-	0.5	μA
V_{CB}=20V	ST2SC1213A	I_{CBO}	-	-	0.5	μA
Collector Base Breakdown Voltage						
at I_C=10μA	ST 2SC1213	$V_{(BR)CBO}$	35	-	-	V
	ST 2SC1213A	$V_{(BR)CBO}$	50	-	-	V
Collector Emitter Breakdown Voltage						
at I_C=1mA	ST 2SC1213	$V_{(BR)CEO}$	35	-	-	V
	ST 2SC1213A	$V_{(BR)CEO}$	50	-	-	V
Emitter Base Breakdown Voltage						
at I_E=10μA	ST 2SC1213	$V_{(BR)EBO}$	4	-	-	V
	ST 2SC1213A	$V_{(BR)EBO}$	4	-	-	V
Collector Saturation Voltage						
at I_C=150mA, I_B=15mA	ST 2SC1213	$V_{CE(sat)}$	-	0.2	0.6	V
	ST 2SC1213A	$V_{CE(sat)}$	-	0.2	0.6	V
Base Emitter Voltage						
at I_C=10mA, V_{CE}=3V	ST 2SC1213	V_{BE}	-	0.64	-	V
	ST 2SC1213A	V_{BE}	-	0.64	-	V