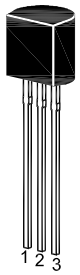
2SC1213 / 2SC1213A

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 2SA673 and 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

Absolute Maximum Ratings (T_a = 25 °C)

Parameter		Symbol	Value	Unit
Collector Base Voltage	2SC1213 2SC1213A	V_{CBO}	35 50	V
Collector Emitter Voltage	2SC1213 2SC1213A	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_{stg}	- 55 to + 150	°C

Characteristics at T_a = 25 °C

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