

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
 Weight approx. 0.19g

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

Parameter	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		$^\circ\text{C}$
Storage Temperature Range	T_S	-55 to +150		$^\circ\text{C}$

Characteristics at $T_{amb}=25^{\circ}C$

Parameter	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 $V_{CB}=20V$	I_{CBO}	-	-	0.5	μA
$V_{CB}=20V$	I_{CBO}	-	-	0.5	μA
Collector Base Breakdown Voltage at $I_C=10\mu A$	$V_{(BR)CBO}$	35	-	-	V
	$V_{(BR)CBO}$	50	-	-	V
Collector Emitter Breakdown Voltage at $I_C=1mA$	$V_{(BR)CEO}$	35	-	-	V
	$V_{(BR)CEO}$	50	-	-	V
Emitter Base Breakdown Voltage at $I_E=10\mu A$	$V_{(BR)EBO}$	4	-	-	V
	$V_{(BR)EBO}$	4	-	-	V
Collector Saturation Voltage at $I_C=150mA$, $I_B=15mA$	$V_{CE(sat)}$	-	0.2	0.6	V
	$V_{CE(sat)}$	-	0.2	0.6	V
Base Emitter Voltage at $I_C=10mA$, $V_{CE}=3V$	V_{BE}	-	0.64	-	V
	V_{BE}	-	0.64	-	V