

2SC1213(A)

Rev.E Mar.-2016

TO-92

NPN

Silicon NPN transistor in a TO-92 Plastic Package.

2SA673(A)

Complementary pair with 2SA673(A).

High frequency amplifier.



PIN1 Base

PIN 2 Collector

PIN 3 Emitter

/ **hFE Classifications & Marking**

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol		Rating	Unit
Collector to Base Voltage	V_{CBO}	2SC1213	35	V
		2SC1213A	50	
Collector to Emitter Voltage	V_{CEO}	2SC1213	35	V
		2SC1213A	50	
Emitter to Base Voltage	V_{EBO}		4.0	V
Collector Current - Continuous	I_C		500	mA
Collector Power Dissipation	P_C		400	mW
Junction Temperature	T_j		150	
Storage Temperature Range	T_{stg}		-55 150	

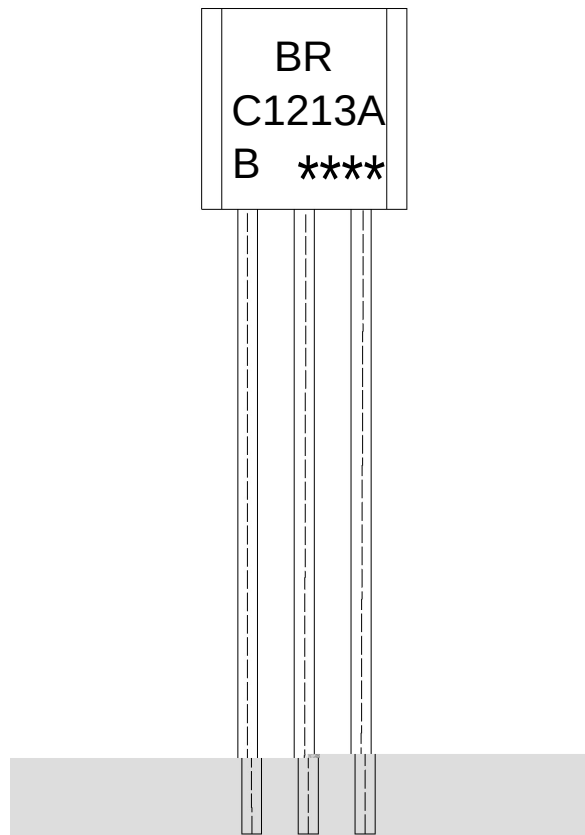
/ Electrical Characteristics(Ta=25)

Parameter	Symbol		Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	2SC1213	$I_C=10\text{ A}$ $I_C=1.0\text{mA}$	35			V
		2SC1213A		50			
Collector to Emitter Breakdown Voltage	V_{CEO}	2SC1213	$I_C=1.0\text{mA}$ $I_B=0$	35			V
		2SC1213A		50			
Emitter to Base Breakdown Voltage	V_{EBO}		$I_E=10\text{ A}$ $I_C=0$	4.0			V
Collector Cut-Off Current	I_{CBO}		$V_{CB}=20\text{V}$ $I_E=0$			0.5	A
DC Current Gain	$h_{FE(1)}$		$V_{CE}=3.0\text{V}$ $I_C=10\text{mA}$	60		320	
	$h_{FE(2)}$		$V_{CE}=3.0\text{V}$ $I_C=500\text{mA}$	10			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$		$I_C=150\text{mA}$ $I_B=15\text{mA}$		0.2	0.6	V
Base to Emitter Voltage	V_{BE}		$V_{CE}=3.0\text{V}$ $I_C=10\text{mA}$		0.64		V

/ Electrical Characteristic Curve

/ Package Dimensions

/ Marking Instructions



BR:

C1213A

B: h_{FE}

Note:

BR: Company Code.

C1213A: Product Type.

B: h_{FE} Classifications Symbol

****: Lot No. Code, code change with Lot No.

() / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-------|-----|-----------|---|--------------------------------------|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 255±5 | | 5±0.5sec; | 2.Peak Temp.:255±5 , Duration:5±0.5sec. | |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

270±5 10±1 sec. Temp:270±5 Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
TO-92	1,000	10	10,000	5	50,000	135×190	237×172×102	560×245×195
	1,000	10	10,000	10	100,000	135×190	237×172×102	560×245×375

/ AMMO

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)	
	Units/tape 只/纸带	Tape/Inner Box 纸带/盒	Rows/Inner Box 纸带层/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Inner Box 盒	Outer Box 箱
TO-92	3,000	1	120	10	30,000	328×230×42	小箱 480×346×235, 大箱 547×407×268

/ Notices