



## TO-92 Plastic-Encapsulated Transistors

**2SC1213**

TRANSISTOR (NPN)

**2SC1213A**

### FEATURE

Power dissipation

$P_{CM}$ : 0.4 W ( $T_{amb}=25^{\circ}C$ )

Collector current

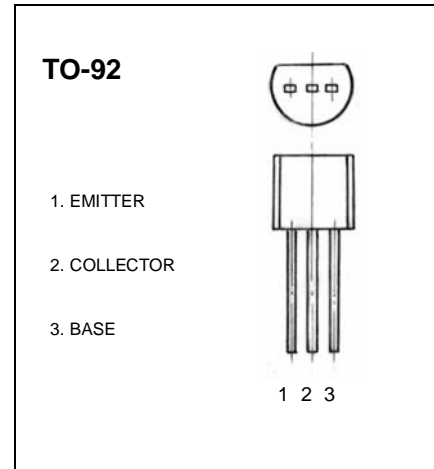
$I_{CM}$ : 0.5 A

Collector-base voltage

$V_{(BR)CBO}$ : 2SC1213 : 35 V  
2SC1213A : 50 V

Operating and storage junction temperature range

$T_J, T_{stg}$ :  $-55^{\circ}C$  to  $+150^{\circ}C$



### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage 2SC1213 2SC1213A	$V_{(BR)CBO}$	$I_C = 10\mu A, I_E = 0$	35 50			V
Collector-emitter breakdown voltage 2SC1213 2SC1213A	$V_{(BR)CEO}$	$I_C = 1 mA, I_B = 0$	35 50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 10\mu A, I_C = 0$	4			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = 20V, I_E = 0$			0.5	$\mu A$
DC current gain	$h_{FE(1)}$	$V_{CE} = 3V, I_C = 10mA$	60		320	
	$h_{FE(2)}$	$V_{CE} = 3V, I_C = 500mA$	10			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 150mA, I_B = 15 mA$		0.2	0.6	V
Base-emitter voltage	$V_{BE}$	$V_{CE} = 3V, I_C = 10 mA$			0.75	V

### CLASSIFICATION OF $h_{FE(1)}$

Rank	B	C	D
Range	60-120	100-200	160-320