



TO-92 Plastic-Encapsulate Transistors

2SC1213

TRANSISTOR (NPN)

2SC1213A**FEATURE**

Power dissipation

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

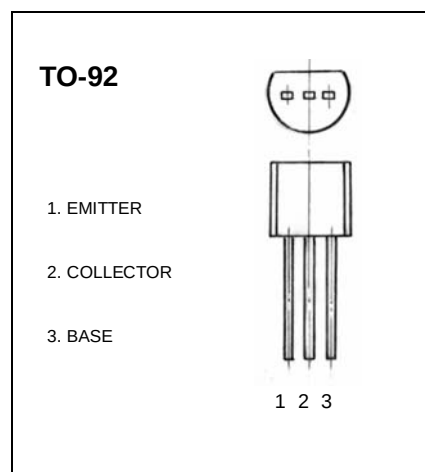
Collector current

 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	μA
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