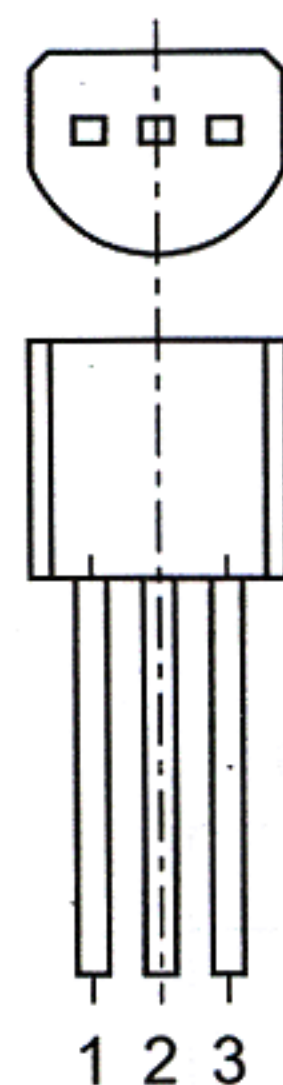


TO-92 Plastic-Encapsulate Transistors

2SC1213 / 2SC1213A TRANSISTOR(NPN)



TO-92

1.EMITTER

2.COLLECTOR

3.BASE

FEATURES

Power dissipation

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

Collector current

I_{CM} : 0.5 A

Collector-base voltage

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

2SC1213A : 50V

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	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 10 \mu A, I_E = 0$	35		V
			50		
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1 mA, I_B = 0$	35		V
			50		
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 10 \mu A, I_C = 0$	4		V
Collector cut-off current	I_{CBO}	$V_{CB} = 20 V, I_E = 0$		0.5	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = 3 V, I_C = 10 mA$	60	320	
	$h_{FE(2)}$	$V_{CE} = 3 V, I_C = 500 mA$	10		
Collector-emitter saturation voltage	V_{CEsat}	$I_C = 150 mA, I_B = 15 mA$		0.6	V
Base-emitter voltage	V_{BE}	$V_{CE} = 3 V, I_C = 10 mA$		0.64	V

CLASSIFICATION OF $h_{FE(1)}$

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

