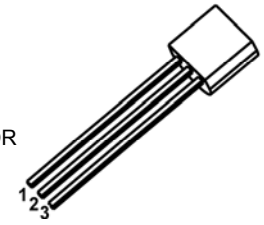
TO-92 Plastic-Encapsulate Transistors

TO – 92

1. EMITTER
2. COLLECTOR
3. BASE



2SC1213A TRANSISTOR (NPN)

FEATURES

- Low Frequency Amplifier
- Complementary Pair with 2SA673A

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	4	V
I_C	Collector Current	0.5	A
P_C	Collector Power Dissipation	400	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	312	℃/W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~+150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= 0.01mA,I_E=0	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA,I_B=0	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=0.01mA,I_C=0	4			V
Collector cut-off current	I_{CBO}	V_{CB}=20V,I_E=0			0.5	μA
Emitter cut-off current	I_{EBO}	V_{EB}=3V,I_C=0			0.1	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=15mA			0.6	V
Base-emitter voltage	V_{BE}	V_{CE}=3V, I_C=10mA			0.75	V

CLASSIFICATION OF $h_{FE(1)}$

RANK	B	C	D
RANGE	60-120	100-200	160-320