

TO-220-3L Plastic-Encapsulate Transistors

2SB857 TRANSISTOR (PNP)

FEATURES

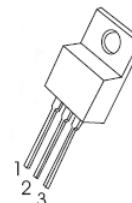
- Low Frequency Power Amplifier

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	-70	V
V _{CE0}	Collector-Emitter Voltage	-50	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current	-4	A
P _C	Collector Power Dissipation	2	W
R _{θJA}	Thermal Resistance From Junction To Ambient	62.5	°C/W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C

TO-220-3L

- 1.BASE
- 2.COLLECTOR
- 3.EMITTER



ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-10μA, I _E =0	-70			V
Collector-emitter breakdown voltage	V _{(BR)CEO} *	I _C =-50mA, I _B =0	-50			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-10μA, I _C =0	-5			V
Collector cut-off current	I _{CBO}	V _{CB} =-50V, I _E =0			-1	μA
Emitter cut-off current	I _{EBO}	V _{EB} =-5V, I _C =0			-1	μA
DC current gain	h _{FE(1)} *	V _{CE} =-4V, I _C =-1A	60		320	
	h _{FE(2)} *	V _{CE} =-4V, I _C =-0.1A	35			
Collector-emitter saturation voltage	V _{CE(sat)} *	I _C =-2A, I _B =-200mA			-1	V
Base-emitter voltage	V _{BE} *	V _{CE} =-4V, I _C =-1A			-1	V
Transition frequency	f _T *	V _{CE} =-4V, I _C =-500mA		15		MHz

*Pulse test: pulse width ≤300μs, duty cycle ≤ 2.0%.

CLASSIFICATION OF h_{FE(1)}

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