2SB857 TRANSISTOR (PNP)

TO-220C

1.BASE
2.COLLECTOR
3.EMITTER

FEATURES

- Low Frequency Power Amplifier

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-70	V
V_{CEO}	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
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	62.5	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-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=-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