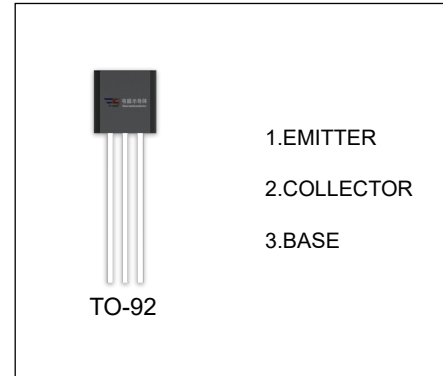


2SA844 TRANSISTOR (PNP)

FEATURES

- High DC Current Gain
- Low Frequency Amplifier



ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
2SA844	TO-92	Bulk	1000pcs/Bag
2SA844-TA	TO-92	Tape	2000pcs/Box

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

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	-55	V
V _{CEO}	Collector-Emitter Voltage	-55	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current -Continuous	-0.1	A
P _D	Collector Power Dissipation	300	mW
R _{θJA}	Thermal Resistance from Junction to Ambient	416	°C /W
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

$T_a=25\text{ }^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-0.01\text{mA}, I_E=0$	-55			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}, I_B=0$	-55			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-0.01\text{mA}, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-18\text{V}, I_E=0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-2\text{V}, I_C=0$			-0.05	μA
DC current gain	h_{FE}	$V_{CE}=-12\text{V}, I_C=-2\text{mA}$	160		800	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-10\text{mA}, I_B=-1\text{mA}$			-0.5	V
Base-emitter voltage	V_{BE}	$V_{CE}=-12\text{V}, I_C=-2\text{mA}$			-0.75	V
Collector output capacitance	C_{ob}	$V_{CE}=-10\text{V}, I_C=0, f=1\text{MHz}$		2		pF
Transition frequency	f_T	$V_{CE}=-12\text{V}, I_C=-2\text{mA}$		200		MHz

CLASSIFICATION OF h_{FE}

RANK	C	D	E
RANGE	160-320	250-500	400-800