

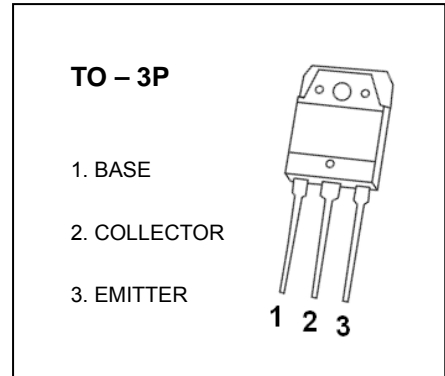


TO-3P Plastic-Encapsulate Transistors

2SA1943 TRANSISTOR (PNP)

FEATURES

- High Collector Current Capability
- High Power Dissipation
- High Frequency
- High Voltage
- Complement to 2SA5200



APPLICATIONS

- High-Fidelity Audio Output Amplifier
- General Purpose Power Amplifier

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

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	-230	V
V _{CEO}	Collector-Emitter Voltage	-230	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current	-15	A
P _C	Collector Power Dissipation	3.5	W
P _{CM}	Collector Power Dissipation (T _C =25°C)	150	W
R _{θJA}	Thermal Resistance From Junction To Ambient	36	°C/W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C

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 =-0.1mA, I _E =0	-230			V
Collector-emitter breakdown voltage	V _{(BR)CEO} *	I _C =-50mA, I _B =0	-230			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-0.1mA, I _C =0	-5			V
Collector cut-off current	I _{CBO}	V _{CB} =-230V, I _E =0			-5	μA
Emitter cut-off current	I _{EBO}	V _{EB} =-5V, I _C =0			-5	μA
DC current gain	h _{FE(1)}	V _{CE} =-5V, I _C =-1A	55		160	
	h _{FE(2)} *	V _{CE} =-5V, I _C =-7A	35			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-8A, I _B =-0.8A			-3	V
Base-emitter voltage	V _{BE}	V _{CE} =-5V, I _C =-7A			-1.5	V
Collector output capacitance	C _{ob}	V _{CB} =-10V, I _E =0, f=1MHz		360		pF
Transition frequency	f _T	V _{CE} =-5V, I _C =-1A		30		MHz

*Pulse test

CLASSIFICATION OF h_{FE(1)}

RANK	R	O
RANGE	55-110	80-160