

TO-3P Plastic-Encapsulate Transistors

3CA1943 TRANSISTOR (PNP)

FEATURES

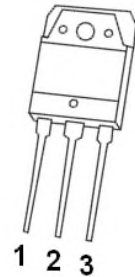
- High Breakdown Voltage
- General Purpose Switching and Amplification

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Para meter	Value	Unit
V_{CB0}	Collector-Base Voltage	-120	V
V_{CE0}	Collector-Emitter Voltage	-120	V
V_{EB0}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-15	A
P_C	Collector Power Dissipation	3	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	42	$^{\circ}\text{C}/\text{W}$
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^{\circ}\text{C}$

TO – 3P

1. BASE
2. COLLECTOR
3. EMITTER



ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}, I_E=0$	-120			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-50\text{mA}, I_B=0$				V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}, I_C=0$				V
Collector cut-off current	I_{CBO}	$V_{CB}=-120\text{V}, I_E=0$			-5	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5\text{V}, I_C=0$			-5	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=-5\text{V}, I_C=-1\text{A}$			160	
	$h_{FE(2)}$	$V_{CE}=-5\text{V}, I_C=-7\text{A}$				
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-8\text{A}, I_B=-800\text{mA}$			-3	V
Transition frequency	f_T	$V_{CE}=-5\text{V}, I_C=-1\text{A}$	0			MHz

*Pulse test

CLASSIFICATION OF $h_{FE(1)}$

RANK R		O
RANGE	55-110	80-160