

2SA1943

PNP PLASTIC-ENCAPSULATE TRANSISTOR

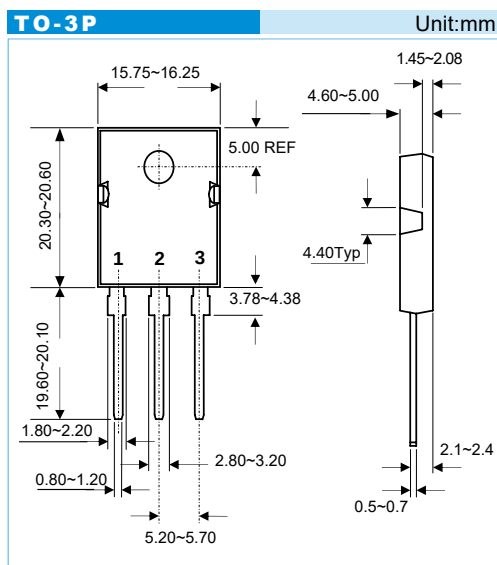
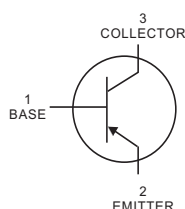
VOLTAGE	230 Volt	POWER	3.5 Watt
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FEATURES

- High Collector Current Capability
- High Power Dissipation
- High Frequency
- High Voltage
- Complement to 2SC5200
- Lead free in compliance with EU RoHS

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



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

Parameter	Symbol	Value	Units
Collector - Emitter Voltage	V_{CEO}	-230	V
Collector - Base Voltage	V_{CBO}	-230	V
Emitter - Base Voltage	V_{EBO}	-5	V
Collector Current - Continuous	I_C	-15	A
Collector Dissipation	P_C	3.5	W
Collector Dissipation ($T_C=25^{\circ}\text{C}$)	P_{CM}	150	W
Thermal resistance junction to ambient	$R_{\theta JA}$	36	$^{\circ}\text{C/W}$
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55~+150	$^{\circ}\text{C}$

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}$, $I_E=0$	-230			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-50\text{mA}$, $I_B=0$	-230			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}$, $I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-230\text{V}$, $I_E=0$			-5	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5\text{V}$, $I_C=0$			-5	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=-5\text{V}$, $I_C=-1\text{A}$	55		160	
	$h_{FE(2)}$	$V_{CE}=-5\text{V}$, $I_C=-7\text{A}$	35			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-8\text{A}$, $I_B=0.8\text{A}$			-3	V
Base-emitter voltage	V_{BE}	$V_{CE}=-5\text{V}$, $I_C=-7\text{A}$			-1.5	V
Collector output capacitance	C_{ob}	$V_{CB}=-10\text{V}$, $I_E=0$, $f=1\text{MHz}$		360		pF
Transition frequency	f_T	$V_{CE}=-5\text{V}$, $I_C=-1\text{A}$		30		MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	R	O
RANGE	55-110	80-160

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Typical Characteristics

