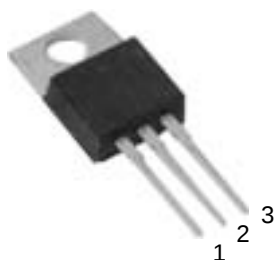


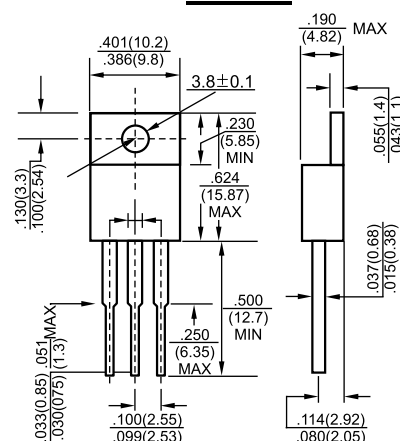
2SA940(PNP)

TO-220 Transistor

TO-220



1. BASE
2. COLLECTOR
3. EMITTER



Features

- ✧ Wide safe Operating Area.
- ✧ Complementary to 2SC2703

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

Dimensions in inches and (millimeters)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-150	V
V_{CEO}	Collector-Emitter Voltage	-150	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-1.5	A
P_C	Collector Power Dissipation	1.5	W
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55-150	$^\circ\text{C}$

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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu\text{A}$, $I_E = 0$	-150			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}$, $I_B = 0$	-150			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}	$V_{CB} = -120\text{V}$, $I_E = 0$			-10	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\text{V}$, $I_C = 0$			-10	μA
DC current gain	h_{FE}	$V_{CE} = -10\text{V}$, $I_C = -0.5\text{A}$	40		140	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -0.5\text{A}$, $I_B = -50\text{mA}$			-1.5	V
Base-emitter voltage	V_{BE}	$V_{CE} = -10\text{V}$, $I_C = -0.5\text{A}$	-0.65		-0.85	V
Transition frequency	f_T	$V_{CE} = -10\text{V}$, $I_C = -0.5\text{A}$		4		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$		55		pF

Typical Characteristics

