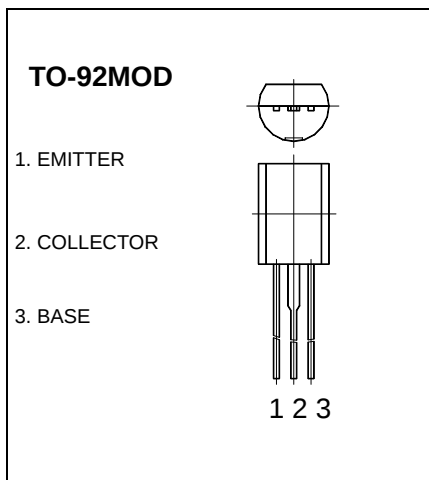


**TO-92MOD Plastic-Encapsulate Transistors****2SA1145** TRANSISTOR (PNP)**FEATURES**

- Complementary to 2SC2705
- Small collector output capacitance: $C_{ob}=2.5\text{pF(Typ.)}$
- High transition frequency: $f_T=200\text{MHz(Typ.)}$

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

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	-50	mA
P_C	Collector Power Dissipation	800	mW
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-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	$V_{(BR)CBO}$	$I_C=-100\text{ }\mu\text{A}$, $I_E=0$	-150			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}$, $I_B=0$	-150			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\text{ }\mu\text{A}$, $I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-150\text{ V}$, $I_E=0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5\text{ V}$, $I_C=0$			-0.1	μA
DC current gain	h_{FE}	$V_{CE}=-5\text{ V}$, $I_C=-10\text{mA}$	80		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-10\text{mA}$, $I_B=-1\text{mA}$			-1	V
Base-emitter voltage	V_{BE}	$V_{CE}=-5\text{ V}$, $I_C=-10\text{mA}$			-0.8	V
Transition frequency	f_T	$V_{CE}=-5\text{ V}$, $I_C=-10\text{mA}$		200		MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10\text{ V}$, $I_E=0$, $f=1\text{ MHz}$		2.5		pF

CLASSIFICATION OF h_{FE}

Rank	O	Y
Range	80-160	120-240
Marking		

Typical Characteristics

2SA1145

