

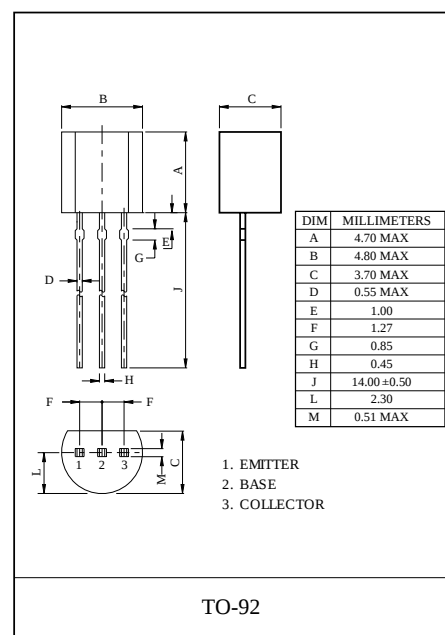
MPSA94 TRANSISTOR (PNP)

FEATURES

- High Breakdown Voltage

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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-400	V
V_{CEO}	Collector-Emitter Voltage	-400	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current	-0.3	A
P_C	Collector Power Dissipation	625	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	200	$^\circ\text{C/W}$
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55 ~ 150	$^\circ\text{C}$



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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=-100\mu\text{A}$ $I_E=0$	-400			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=-1.0\text{mA}$ $I_B=0$	-400			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=-100\mu\text{A}$ $I_C=0$	-5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-300\text{V}$ $I_E=0$			-0.1	μA
Collector Cut-Off Current	I_{CEO}	$V_{CE}=-400\text{V}$ $I_E=0$			-5.0	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-4.0\text{V}$ $I_C=0$			-0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-10\text{V}$ $I_C=-10\text{mA}$	80		300	
	$h_{FE(2)}$	$V_{CE}=-10\text{V}$ $I_C=-1.0\text{mA}$	70			
	$h_{FE(3)}$	$V_{CE}=-10\text{V}$ $I_C=-100\text{mA}$	40			
Collector to Emitter Saturation Voltage	$V_{CE(sat)(1)}$	$I_C=-10\text{mA}$ $I_B=-1.0\text{mA}$			-0.2	V
	$V_{CE(sat)(2)}$	$I_C=-50\text{mA}$ $I_B=-5.0\text{mA}$			-0.3	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-10\text{mA}$ $I_B=-1.0\text{mA}$			-0.75	V
Transition Frequency	f_T	$V_{CE}=-5.0\text{V}$ $I_C=-10\text{mA}$ $f=30\text{MHz}$	50			MHz

Electrical Characteristic Curve

