

SOT-23 Plastic-Encapsulate Transistors

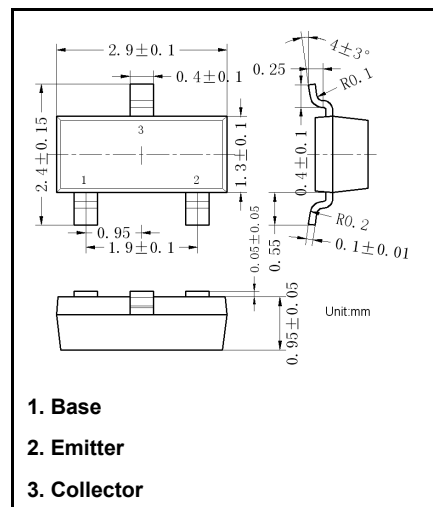
MMBTA92

PNP Transistors

Features

- High voltage transistor

Marking: 2D



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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector Base Voltage	-300	V
V_{CEO}	Collector Emitter Voltage	-300	V
V_{EBO}	Emitter Base Voltage	-5	V
I_C	Collector Current -Continuous	-200	mA
I_{CM}	Collector Current -Pulsed	-500	mA
P_C	Collector Power Dissipation	300	mW
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55 ~ +150	$^{\circ}\text{C}$
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	417	$^{\circ}\text{C/W}$

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

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C = -100\mu\text{A}$, $I_E = 0$	-300			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C = -1\text{mA}$, $I_B = 0$	-300			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E = -100\mu\text{A}$, $I_C = 0$	-5			V
I_{CBO}	Collector cut-off current	$V_{CB} = -200\text{V}$, $I_E = 0$			-250	nA
I_{EBO}	Emitter cut-off current	$V_{EB} = -5\text{V}$, $I_C = 0$			-100	nA
$h_{FE(1)}$	DC current gain	$V_{CE} = -5\text{V}$, $I_C = -1\text{mA}$	100			
$h_{FE(2)}$		$V_{CE} = -5\text{V}$, $I_C = -10\text{mA}$	100			
$h_{FE(3)}$		$V_{CE} = -10\text{V}$, $I_C = -1\text{mA}$	60			
$h_{FE(4)}$		$V_{CE} = -10\text{V}$, $I_C = -10\text{mA}$	100		200	
$h_{FE(5)}$		$V_{CE} = -10\text{V}$, $I_C = -30\text{mA}$	60			
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C = -20\text{mA}$, $I_B = -2\text{mA}$			-0.2	V
$V_{BE(sat)}$	Base-emitter saturation voltage	$I_C = -20\text{mA}$, $I_B = -2\text{mA}$			-0.9	V
f_T	Transition frequency	$V_{CE} = -20\text{V}$, $I_C = -10\text{mA}$, $f = 30\text{MHz}$	50			MHz

Typical Characteristics

