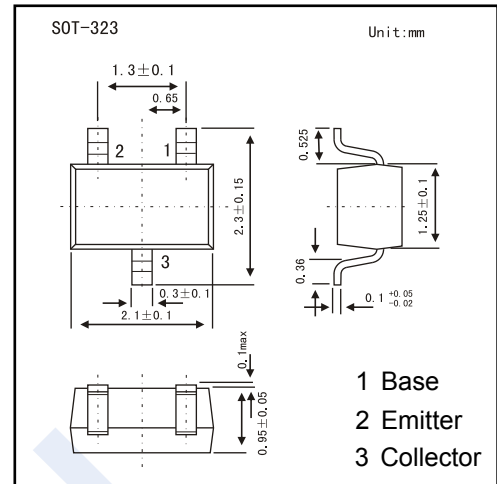


PNP Transistors

MMSTA92 (KMSTA92)

■ Features

- Small Surface Mount Package
- Ideal for Medium Power Amplification and Switching
- Complementary to MMSTA42



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-310	V
Collector - Emitter Voltage	V_{CE0}	-305	
Emitter - Base Voltage	V_{EB0}	-5	
Collector Current - Continuous	I_C	-200	mA
Collector Current - Pulse	I_{CP}	-500	
Collector Power Dissipation	P_C	200	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	625	$^\circ\text{C}/\text{W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to 150	

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_C = -100 \mu\text{A}$, $I_E = 0$	-310			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = -1 \text{ mA}$, $I_B = 0$	-305			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100 \mu\text{A}$, $I_C = 0$	-5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = -200 \text{ V}$, $I_E = 0$			-0.25	μA
Collector-emitter cut-off current	I_{CEO}	$V_{CE} = -200 \text{ V}$, $I_B = 0$			-0.25	
		$V_{CE} = -300 \text{ V}$, $I_B = 0$			-5	
Emitter cut-off current	I_{EBO}	$V_{EB} = -5 \text{ V}$, $I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -20 \text{ mA}$, $I_B = -2 \text{ mA}$			-0.2	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -20 \text{ mA}$, $I_B = -2 \text{ mA}$			-0.9	
DC current gain	$h_{FE(1)}$	$V_{CE} = -10 \text{ V}$, $I_C = -1 \text{ mA}$	60			
	$h_{FE(2)}$	$V_{CE} = -10 \text{ V}$, $I_C = -10 \text{ mA}$	100		200	
	$h_{FE(3)}$	$V_{CE} = -10 \text{ V}$, $I_C = -30 \text{ mA}$	60			
Collector output capacitance	C_{ob}	$V_{CB} = -20 \text{ V}$, $I_E = 0$, $f = 1 \text{ MHz}$			6	pF
Transition frequency	f_T	$V_{CE} = -20 \text{ V}$, $I_C = -10 \text{ mA}$, $f = 30 \text{ MHz}$	50			MHz

■ Marking

Marking	K3R
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PNP Transistors

MMSTA92 (KMSTA92)

■ Typical Characteristics

