

# PNP Silicon Epitaxial Planar Transistor

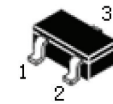
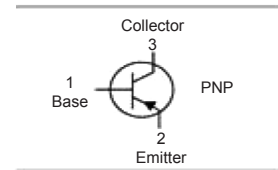


## Features:

- Power dissipation. ( $P_C = 200\text{mW}$ )
- Epitaxial planar die construction.
- Complementary to MMSTA42.
- Also available in lead free version.

## Applications:

- General purpose application and switching application.



SOT-323

**Maximum Rating:** @  $T_A = 25^\circ\text{C}$  unless otherwise specified

Parameter	Symbol	Value	Unit
Collector-Base Voltage	$V_{CBO}$	-310	V
Collector-Emitter Voltage	$V_{CEO}$	-305	
Emitter-Base Voltage	$V_{EBO}$	-5	
Collector Current-continuous	$I_C$	-300	mA
Collector Dissipation	$P_C$	200	mW
Junction and Storage Temperature	$T_J, T_{stg}$	-55 to 150	$^\circ\text{C}$

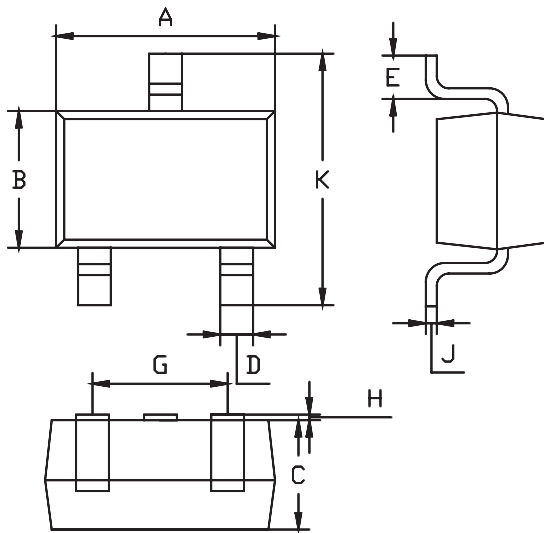
**Electrical Characteristics:** @  $T_A = 25^\circ\text{C}$  unless otherwise specified

Parameter	Symbol	Test Conditions	Min.	Max.	Unit
Collector-base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -100\mu\text{A}, I_E = 0$	-310		V
Collector-emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, I_B = 0$	-305		
Emitter-base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -100\mu\text{A}, I_C = 0$	-5		
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -200\text{V}, I_E = 0$		-0.25	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -5\text{V}, I_C = 0$		-0.1	
DC Current Gain	$h_{FE}$	$V_{CE} = -10\text{V}, I_C = -1\text{mA}$ $V_{CE} = -10\text{V}, I_C = -10\text{mA}$ $V_{CE} = -10\text{V}, I_C = -80\text{mA}$	60 100 60	200	
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	
Transition Frequency	$f_T$	$V_{CE} = -20\text{V}, I_C = -10\text{mA}, f = 30\text{MHz}$	50		MHz

# PNP Silicon Epitaxial Planar Transistor

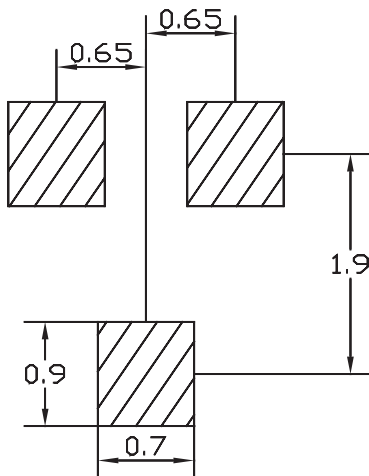


## Package Outline:



SOT-323		
Dim	Min.	Max.
A	1.8	2.2
B	1.15	1.35
C	1 Typical	
D	0.15	0.35
E	0.25	0.4
G	1.2	1.4
H	0.02	0.1
J	0.1 Typical	
K	2.1	2.3
All Dimensions in mm		

## Soldering Footprint:



Dimensions : Millimetres

## Part Number Table

Description	Part Number
Transistor, Bipolar, PNP, -305V, -300mA, SOT-323	MMSTA92-7-F

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