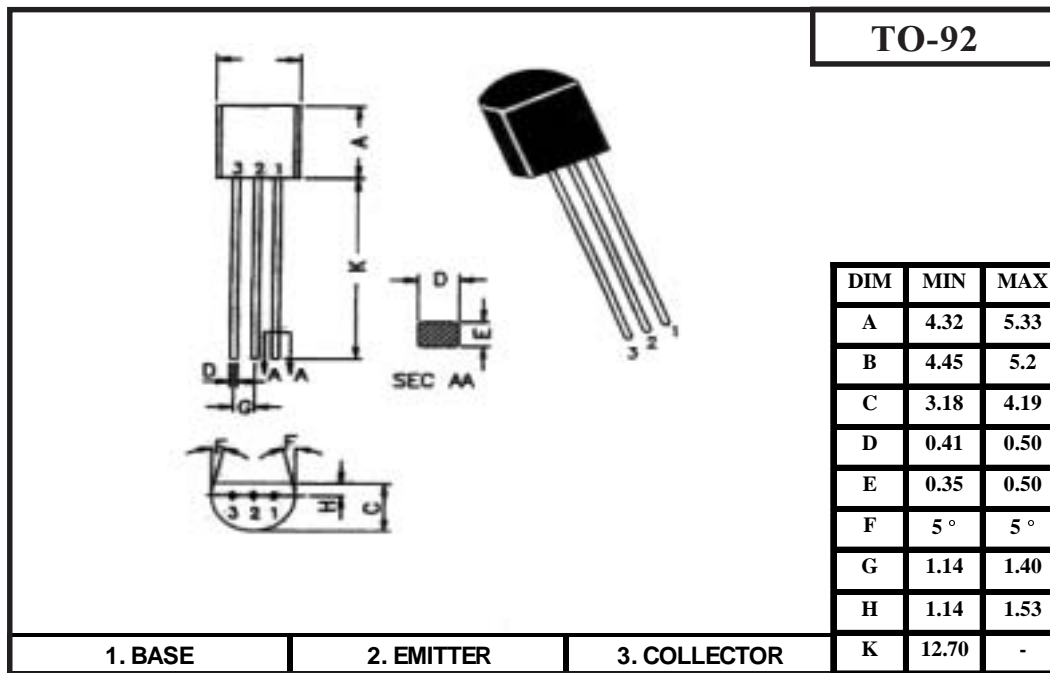




**SEMICONDUCTOR**  
TECHNICAL SPECIFICATION

**CSA950**

## PNP Planar Epitaxial Transistor



### Absolute Maximun Ratings (Ta=25°C)

	Symbol	Ratings	Unit
Collector-Emmitter Voltage	$V_{CEO}$	30	V
Collector Base Voltage	$V_{CBO}$	35	V
Emitter Base Voltage	$V_{EBO}$	5	V
Collector current	$I_C$	800	mA
Emitter Current	$I_{EM}$	800	mA
Collector Power Dissipation	$P_C$	600	mW
Operating and Storage Junction	$T_j$ $T_{stg}$	-50 to +150	°C
Temperature Range			

## Characteristics Ratings

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

	Symbol	Test Conditions	min.	Typ.	max.	Unit
Collector Emitter Voltage	$V_{CEO}$	$I_C = 10\text{mA}, I_B = 0$	30			V
Collector Cut off Current	$I_{CBO}$	$V_C = 35\text{V}, I_E = 0$			0.1	$\mu\text{A}$
Emitter Cut off Current	$I_{EBO}$	$V_{EB} = 5\text{V}, I_C = 0$			0.1	$\mu\text{A}$
DC Current Gain	$h_{FE(1)}$	$V_{CE} = 1\text{V}, I_C = 100\text{mA}$	100		320	
	$h_{FE(2)}$	$V_{CE} = 1\text{V}, I_C = 700\text{mA}$	35			
Collector Emitter Saturation Voltage	$V_{CE(SAT)}^*$	$I_C = 500\text{mA}, I_B = 20\text{mA}$			0.7	V
Base Emitter on Voltage	$V_{BE(on)}$	$V_{CE} = 5\text{V}, I_C = 10\text{mA}$	0.5		0.8	
Transition Frequency	$f_T$	$I_C = 10\text{mA}, V_{CE} = 5\text{V}$		120		MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$		19		pF

\* Pulse Condition: Width  $\leq 300\text{ms}$ , Duty Cycle  $\leq 2\%$