



Micro Commercial Components
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MPSA94

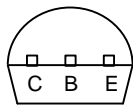
PNP Silicon High Voltage Transistor

625mW

Features

- Through Hole Package
- 150°C Junction Temperature

Pin Configuration
Bottom View

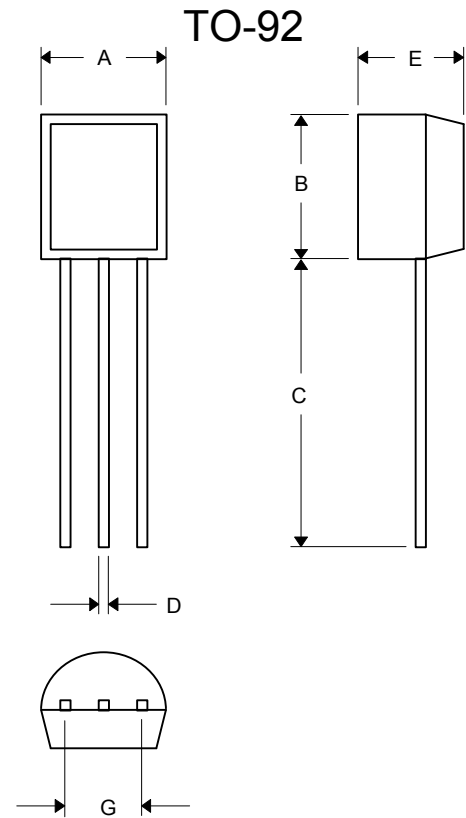


Mechanical Data

- Case: TO-92, Molded Plastic
- Marking: A94

Maximum Ratings @ 25°C Unless Otherwise Specified

Charateristic	Symbol	Value	Unit
Collector-Emitter Voltage	V_{CEO}	-400	V
Collector-Base Voltage	V_{CBO}	-400	V
Emitter-Base Voltage	V_{EBO}	-5.0	V
Collector Current(DC)	I_C	-200	mA
Power Dissipation@ $T_A=25^\circ\text{C}$	P_d	625 5.0	mW mW/°C
Power Dissipation@ $T_C=25^\circ\text{C}$	P_d	1.5 12	W mW/°C
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	200	°C/W
Thermal Resistance, Junction to Case	$R_{\theta JC}$	83.3	°C/W
Operating & Storage Temperature	T_j, T_{STG}	-55~150	°C



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.175	.185	4.45	4.70	
B	.175	.185	4.46	4.70	
C	.500	---	12.7	---	
D	.016	.020	0.41	0.63	
E	.135	.145	3.43	3.68	
G	.095	.105	2.42	2.67	

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

Characteristic	Symbol	Min	Max	Unit
OFF CHARACTERISTICS				
Collector–Emitter Breakdown Voltage ⁽¹⁾ ($I_C = -1.0\text{ mAdc}$, $I_B = 0$)	$V_{(BR)CEO}$	-400	—	Vdc
Collector–Base Breakdown Voltage ($I_C = -100\text{ uAdc}$, $I_E = 0$)	$V_{(BR)CBO}$	-400	—	Vdc
Emitter–Base Breakdown Voltage ($I_E = -100\text{ uAdc}$, $I_C = 0$)	$V_{(BR)EBO}$	-5.0	—	Vdc
Collector Cutoff Current ($V_{CB} = -300\text{ Vdc}$, $I_E = 0$)	I_{CBO}	—	-0.1	μAdc
Emitter Cutoff Current ($V_{EB} = -4.0\text{ Vdc}$, $I_C = 0$)	I_{EBO}	—	-0.1	μAdc
ON CHARACTERISTICS⁽¹⁾				
DC Current Gain ⁽¹⁾ ($I_C = -1.0\text{ mAdc}$, $V_{CE} = -10\text{ Vdc}$) ($I_C = -10\text{ mAdc}$, $V_{CE} = -10\text{ Vdc}$) ($I_C = -100\text{ mAdc}$, $V_{CE} = -10\text{ Vdc}$)	h_{FE}	70 80 60	300	
Collector–Emitter Saturation Voltage ⁽¹⁾ ($I_C = -10\text{ mAdc}$, $I_B = -1.0\text{ mAdc}$) ($I_C = -50\text{ mAdc}$, $I_B = -5.0\text{ mAdc}$)	$V_{CE(sat)}$	— —	-0.2 -0.3	Vdc
Base–Emitter Saturation Voltage ($I_C = -10\text{ mAdc}$, $I_B = -1.0\text{ mAdc}$)	$V_{BE(sat)}$	—	-0.75	Vdc
SMALL–SIGNAL CHARACTERISTICS				
Output Capacitance ($V_{CB} = 20\text{ Vdc}$, $I_E = 0$, $f = 1.0\text{ MHz}$)	C_{obo}	—	7.0	pF
Input Capacitance ($V_{EB} = 0.5\text{ Vdc}$, $I_C = 0$, $f = 1.0\text{ MHz}$)	C_{ibo}	—	130	pF
Small–Signal Current Gain ($I_C = 10\text{ mAdc}$, $V_{CE} = 10\text{ Vdc}$, $f = 20\text{ MHz}$)	h_{fe}	1.0	—	—

1. Pulse Test: Pulse Width $\leq 300\text{ }\mu\text{s}$, Duty Cycle $\leq 2.0\%$.