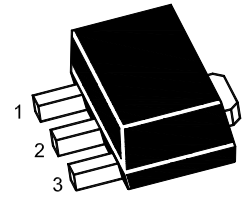


MPSA94U

PNP Silicon Epitaxial Planar Transistor

for high voltage switching and amplifier applications



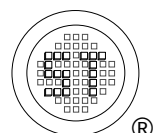
1.Base 2.Collector 3.Emitter
SOT-89 Plastic Package

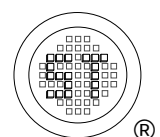
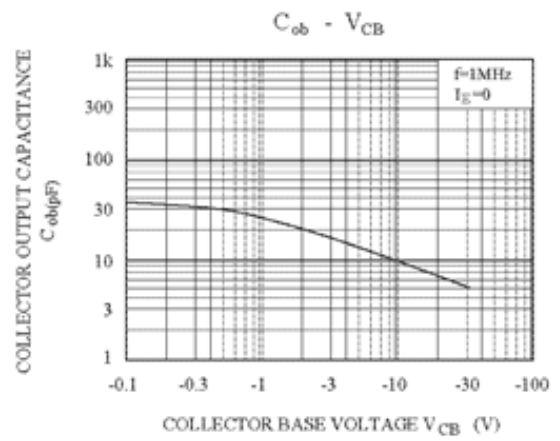
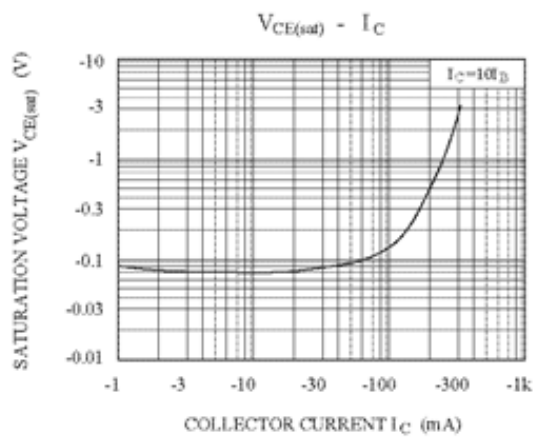
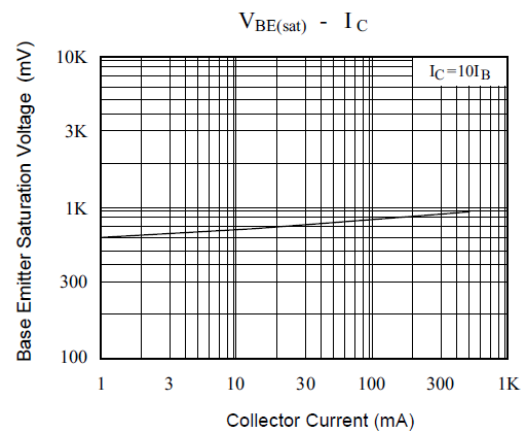
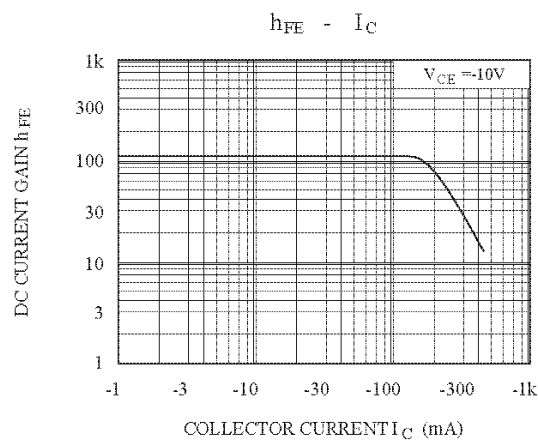
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{\text{CBO}}$	400	V
Collector Emitter Voltage	$-V_{\text{CEO}}$	400	V
Emitter Base Voltage	$-V_{\text{EBO}}$	6	V
Collector Current	$-I_{\text{C}}$	300	mA
Total Power Dissipation	P_{tot}	625	mW
Junction Temperature	T_{J}	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

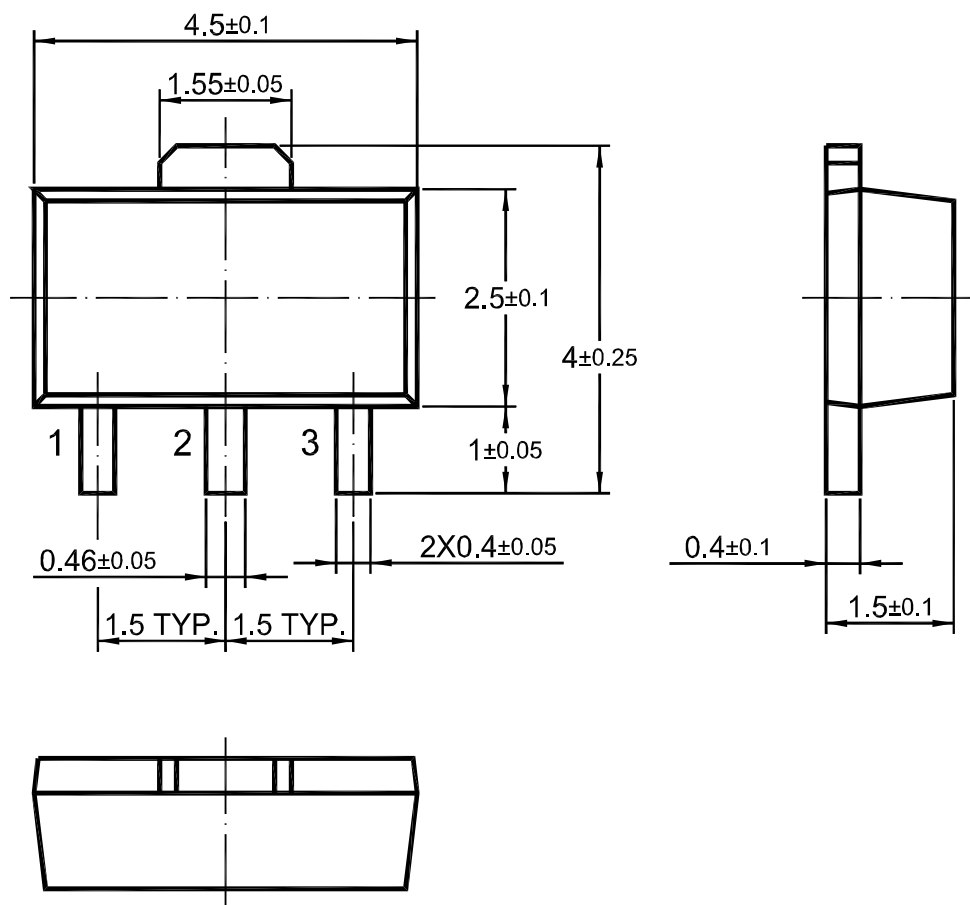
Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $-V_{\text{CE}} = 10 \text{ V}$, $-I_{\text{C}} = 1 \text{ mA}$	h_{FE}	70	-	-
at $-V_{\text{CE}} = 10 \text{ V}$, $-I_{\text{C}} = 10 \text{ mA}$	h_{FE}	80	300	-
at $-V_{\text{CE}} = 10 \text{ V}$, $-I_{\text{C}} = 50 \text{ mA}$	h_{FE}	70	-	-
at $-V_{\text{CE}} = 10 \text{ V}$, $-I_{\text{C}} = 100 \text{ mA}$	h_{FE}	60	-	-
Collector Base Cutoff Current at $-V_{\text{CB}} = 300 \text{ V}$	$-I_{\text{CBO}}$	-	0.1	μA
Collector Emitter Cutoff Current at $-V_{\text{CE}} = 400 \text{ V}$	$-I_{\text{CES}}$	-	1	μA
Emitter Base Cutoff Current at $-V_{\text{EB}} = 4 \text{ V}$	$-I_{\text{EBO}}$	-	0.1	μA
Collector Base Breakdown Voltage at $-I_{\text{C}} = 100 \mu\text{A}$	$-V_{(\text{BR})\text{CBO}}$	400	-	V
Collector Emitter Breakdown Voltage at $-I_{\text{C}} = 1 \text{ mA}$	$-V_{(\text{BR})\text{CEO}}$	400	-	V
Emitter Base Breakdown Voltage at $-I_{\text{E}} = 10 \mu\text{A}$	$-V_{(\text{BR})\text{EBO}}$	6	-	V
Collector Emitter Saturation Voltage at $-I_{\text{C}} = 10 \text{ mA}$, $-I_{\text{B}} = 1 \text{ mA}$	$-V_{\text{CE}(\text{sat})}$	-	0.2	V
at $-I_{\text{C}} = 50 \text{ mA}$, $-I_{\text{B}} = 5 \text{ mA}$		-	0.5	
Base Emitter Saturation Voltage at $-I_{\text{C}} = 10 \text{ mA}$, $-I_{\text{B}} = 1 \text{ mA}$	$-V_{\text{BE}(\text{sat})}$	-	0.75	V
Collector Output Capacitance at $-V_{\text{CB}} = 20 \text{ V}$, $f = 1 \text{ MHz}$	C_{ob}	-	7	pF





SOT-89 PACKAGE OUTLINE



Dimensions in mm

