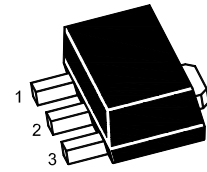


MPSA92U

PNP Silicon Expitaxial Planar Transistor

for high voltage switching and amplifier applications.



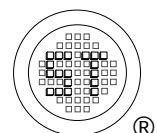
1.Base 2.Collector 3.Emitter
SOT-89 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	300	V
Collector Emitter Voltage	$-V_{CEO}$	300	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	500	mA
Power Dissipation	P_{tot}	500	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 $-I_C = 1\text{ mA}$, $-V_{CE} = 10\text{ V}$ at $-I_C = 10\text{ mA}$, $-V_{CE} = 10\text{ V}$ at $-I_C = 30\text{ mA}$, $-V_{CE} = 10\text{ V}$	h_{FE} h_{FE} h_{FE}	25 40 25	- - -	- - -
Collector Base Cutoff Current at $-V_{CB} = 200\text{ V}$	$-I_{CBO}$	-	0.25	μA
Emitter Base Cutoff Current at $-V_{EB} = 3\text{ V}$	$-I_{EBO}$	-	0.1	μA
Collector Base Breakdown Voltage at $-I_C = 100\text{ }\mu\text{A}$	$-V_{(BR)CBO}$	300	-	V
Collector Emitter Breakdown Voltage at $-I_C = 1\text{ mA}$	$-V_{(BR)CEO}$	300	-	V
Emitter Base Breakdown Voltage at $-I_E = 100\text{ }\mu\text{A}$	$-V_{(BR)EBO}$	5	-	V
Collector Emitter Saturation Voltage at $-I_C = 20\text{ mA}$, $-I_B = 2\text{ mA}$	$-V_{CE(sat)}$	-	0.5	V
Base Emitter Saturation Voltage at $-I_C = 20\text{ mA}$, $-I_B = 2\text{ mA}$	$-V_{BE(sat)}$	-	0.9	V
Gain Bandwidth Product at $-I_C = 10\text{ mA}$, $-V_{CE} = 20\text{ V}$, $f = 100\text{ MHz}$	f_T	50	-	MHz
Collector Output Capacitance at $-V_{CB} = 20\text{ V}$, $f = 1\text{ MHz}$	C_{ob}	-	6	pF



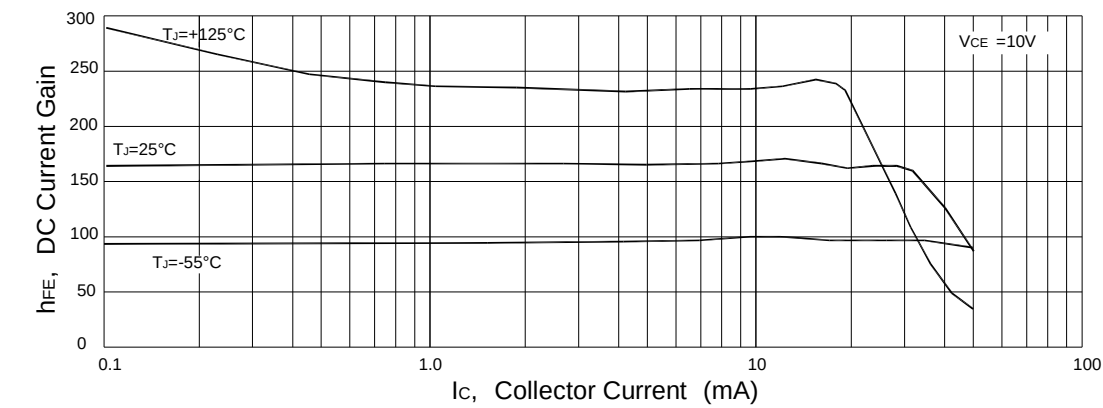


Figure 1. DC Current Gain

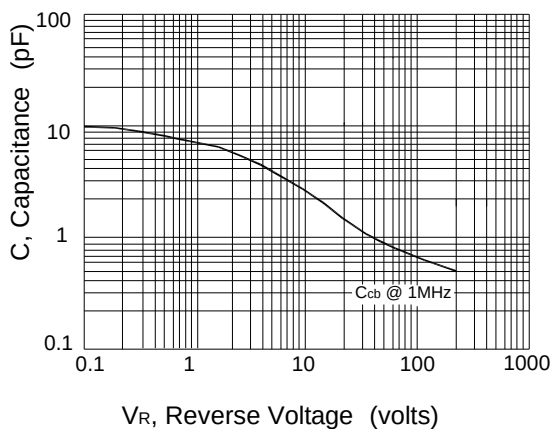


Figure 2. Capacitance

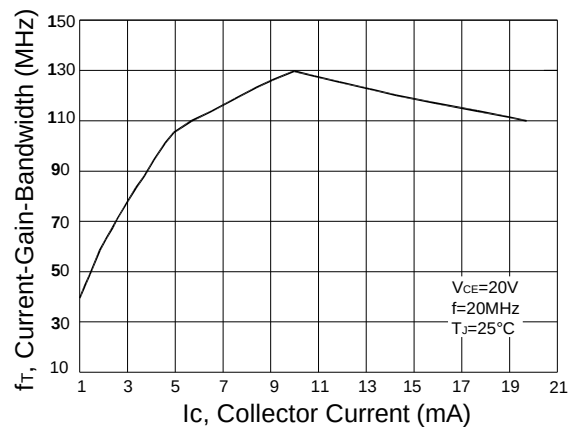
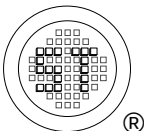
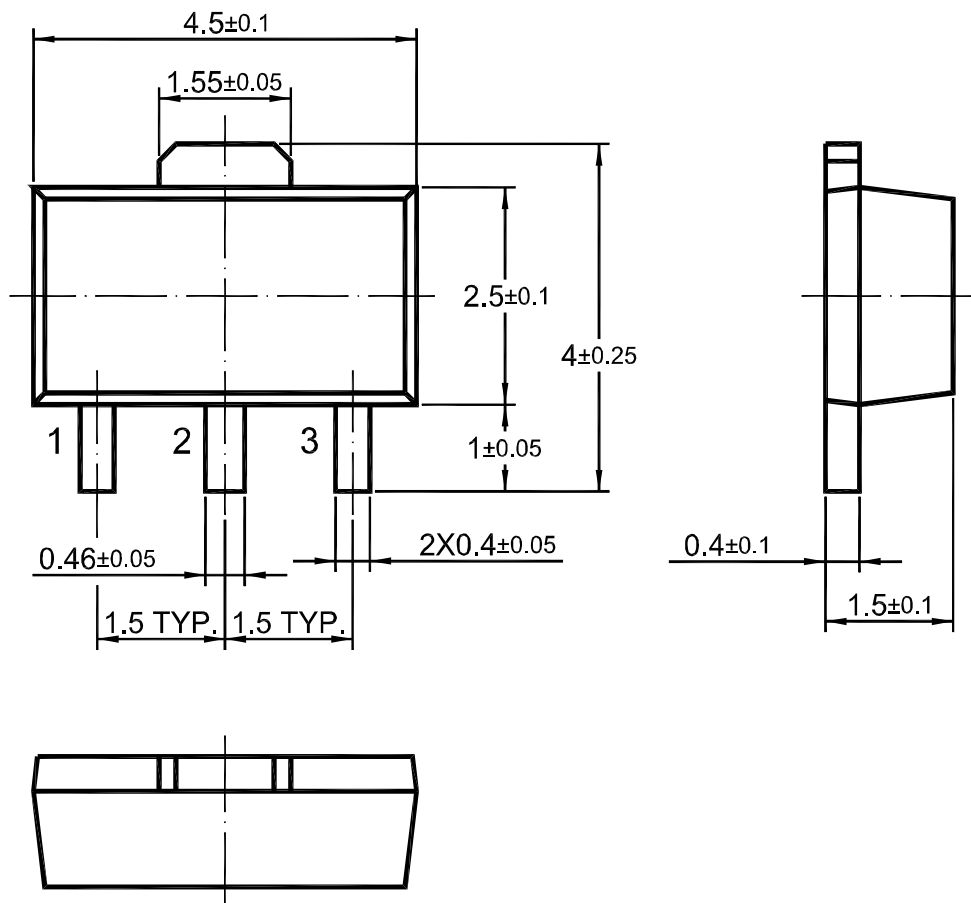


Figure 3. Current-Gain-Bandwidth



MPSA92U

SOT-89 PACKAGE OUTLINE



Dimensions in mm

