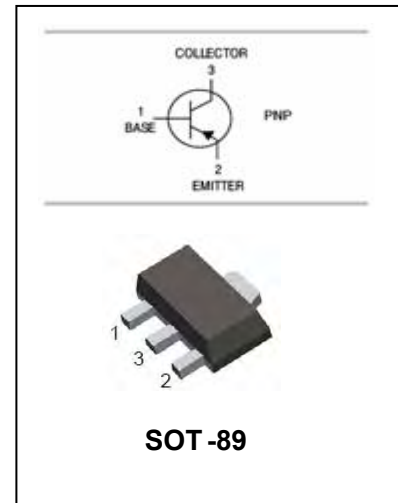


## PNP Silicon Epitaxial Planar Transistor

### FEATURES

- $P_{CM}=0.5W(T_{amb}=25^{\circ}C)$ .
- High voltage..
- Complementary: A42.



### APPLICATIONS

- Designed for high voltage driver application.

### ORDERING INFORMATION

Type No.	Marking	Package Code
A92	A92	SOT-89

### MAXIMUM RATING @ $T_a=25^{\circ}C$ unless otherwise specified

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	-300	V
$V_{CEO}$	Collector-Emitter Voltage	-300	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current -Continuous	-0.5	A
$P_C$	Collector Dissipation	500	mW
$T_j, T_{stg}$	Junction and Storage Temperature	-55~150	$^{\circ}C$

## ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter S	ymbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu A, I_E = 0$	-300			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1.0mA, I_B = 0$	-300			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu A, I_C = 0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -200V, I_B = 0$			-0.25	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -3V, I_C = 0$			-0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE} = -10V, I_C = -1mA$	60			
		$V_{CE} = -10V, I_C = -10mA$	100	300		
		$V_{CE} = -10V, I_C = -30mA$	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -20mA, I_B = -2mA$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -20mA, I_B = -2mA$			-0.9	V
Transition frequency	$f_T$	$V_{CE} = -20V, I_C = -10mA$ $f = 100MHz$		50		MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = -20V, I_E = 0, f = 1MHz$		6		pF

## TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

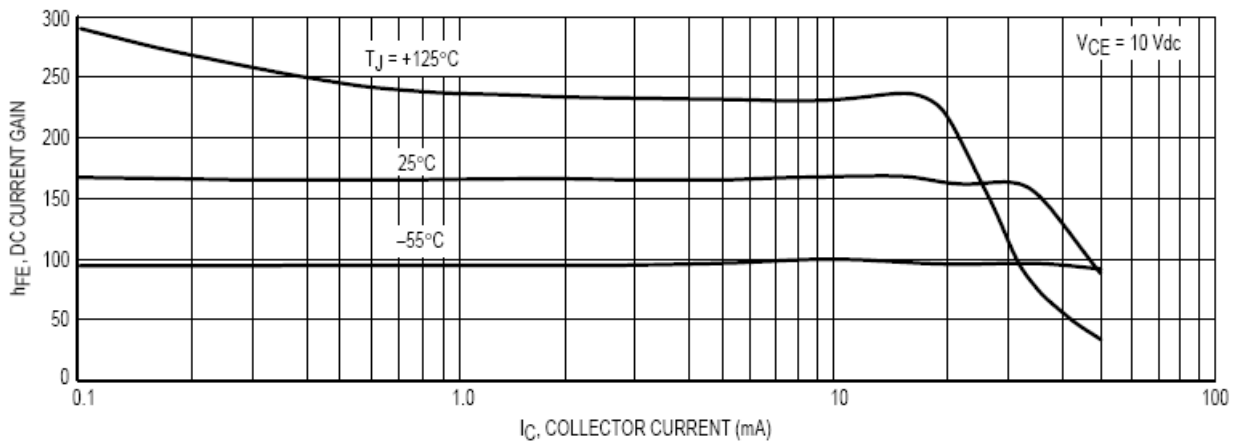
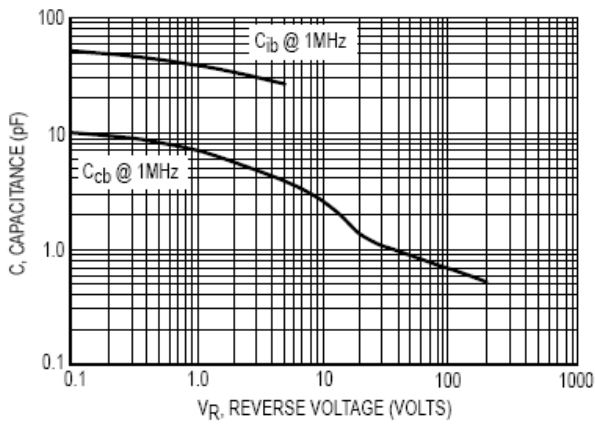
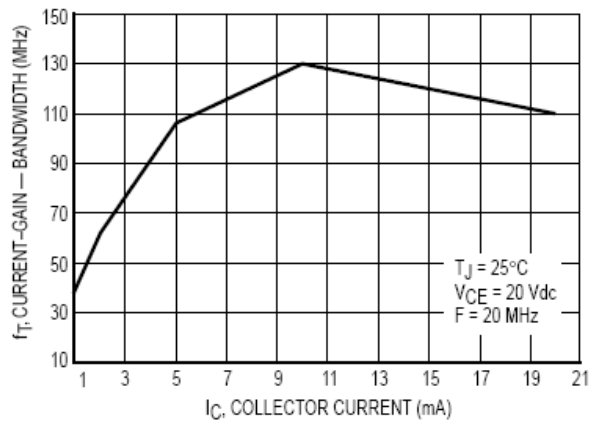


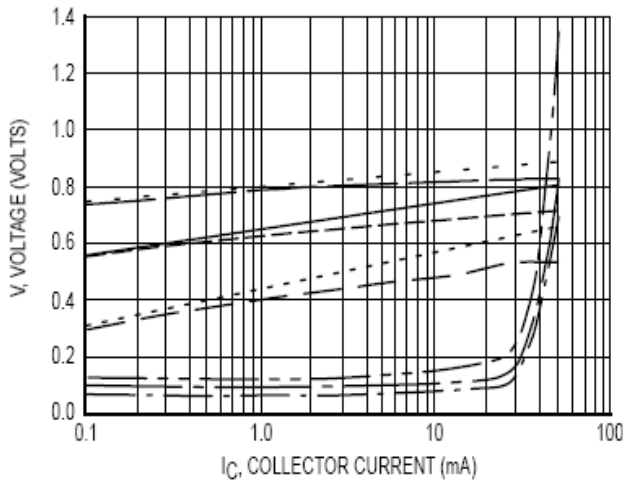
Figure 1. DC Current Gain



**Figure 2. Capacitance**



**Figure 3. Current-Gain — Bandwidth**



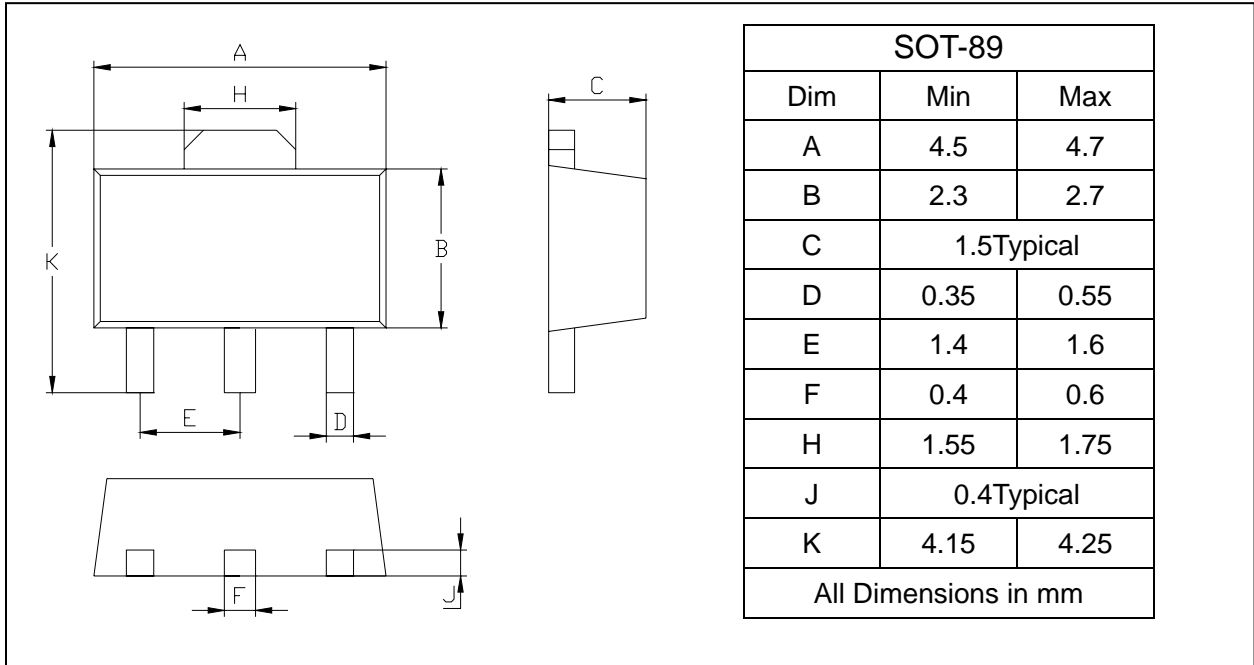
**Figure 4. "ON" Voltages**

- VCE(sat) @ 25°C, IC/IB = 10
- VCE(sat) @ 125°C, IC/IB = 10
- VCE(sat) @ -55°C, IC/IB = 10
- VBE(sat) @ 25°C, IC/IB = 10
- VBE(sat) @ 125°C, IC/IB = 10
- VBE(sat) @ -55°C, IC/IB = 10
- VBE(on) @ 25°C, VCE = 10 V
- VBE(on) @ 125°C, VCE = 10 V
- VBE(on) @ -55°C, VCE = 10 V

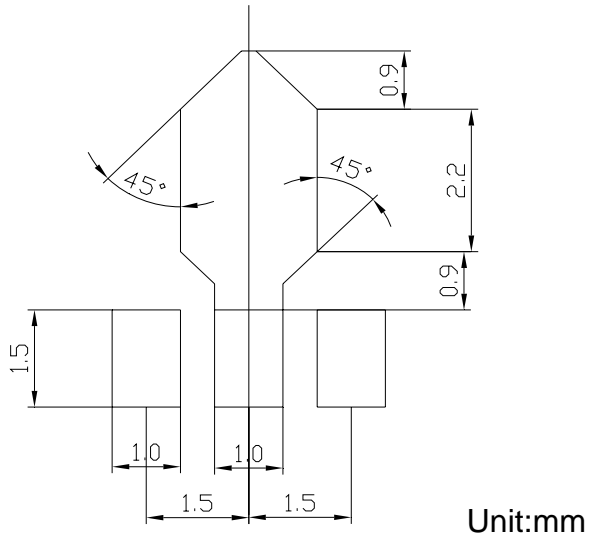
## PACKAGE OUTLINE

Plastic surface mounted package

SOT-89



## SOLDERING FOOTPRINT



## PACKAGE INFORMATION

Device	Package	Shipping
A92	SOT-89	1000/Tape&Reel