

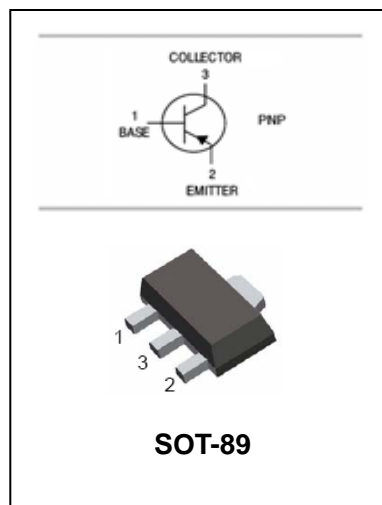
## PNP Silicon Epitaxial Planar Transistor

## 2SA1797

### FEATURES

- Low saturation voltage  $V_{CE(sat)} = -0.35V$  (Max.)  
( $I_C/I_B = -1A/-0.5A$ ).
- Excellent DC current gain characteristics.
- Complements the 2SA1797 and 2SC4672.
- MSL 3

**HF**



### APPLICATIONS

- Low frequency transistor.

### ORDERING INFORMATION

Type No.	Marking	Package Code
2SA1797	AGP/AGQ	SOT-89

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

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	-50	V
$V_{CEO}$	Collector-Emitter Voltage	-50	V
$V_{EBO}$	Emitter-Base Voltage	-6	V
$I_C$	Collector Current	DC	-3
		Pulse	-6
$P_C$	Collector Dissipation	500	mW
$T_j, T_{stg}$	Junction and Storage Temperature	-55 to +150	$^\circ C$

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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-50\mu A, I_E=0$	-50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1.0mA, I_B=0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-50\mu A, I_C=0$	-6			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=-50V, I_B=0$			-0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=-5V, I_C=0$			-0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=-2V, I_C=-500mA$	82		180	
			120		270	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-1A, I_B=-50mA$		-0.15	-0.35	V
Transition frequency	$f_T$	$V_{CE}=-2V, I_E=-500mA$ $f=100MHz$		200		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=-10V, I_E=0, f=1MHz$		36		pF

**CLASSIFICATION OF  $h_{FE}$**

Rank	P	Q
Range	82-180	120-270
Marking	AGP	AGQ

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TYPICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified

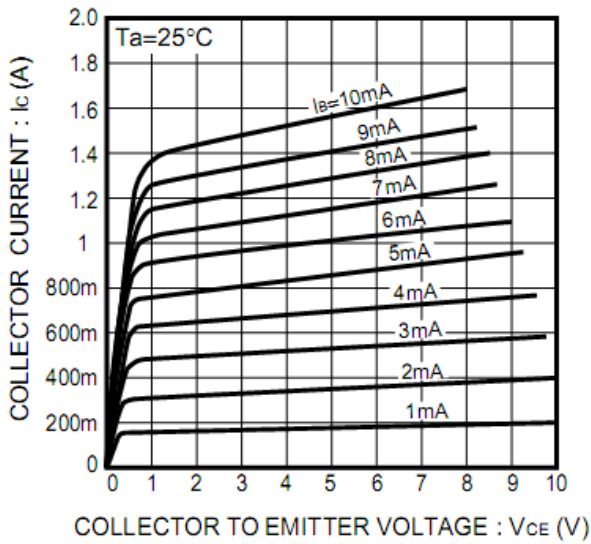


Fig.1 Grounded emitter output characteristics

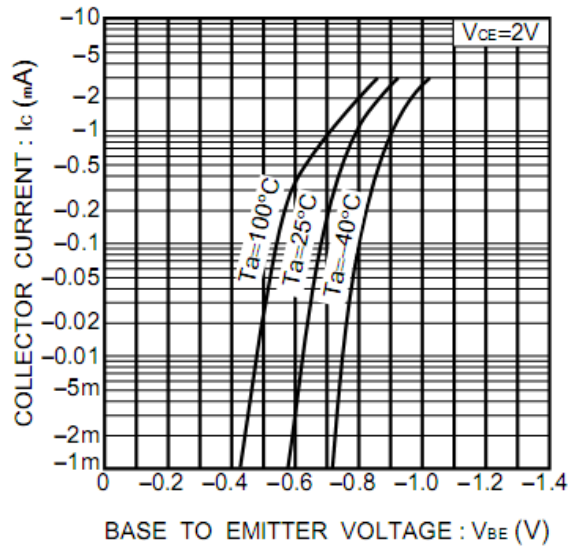


Fig.2 Grounded emitter propagation characteristics

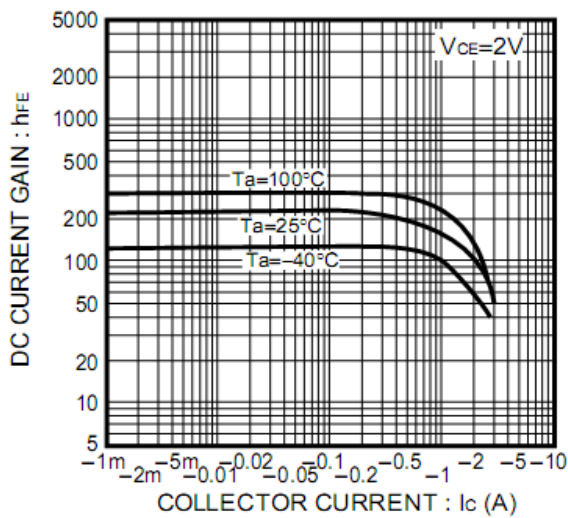


Fig.3 DC current gain vs. collector current

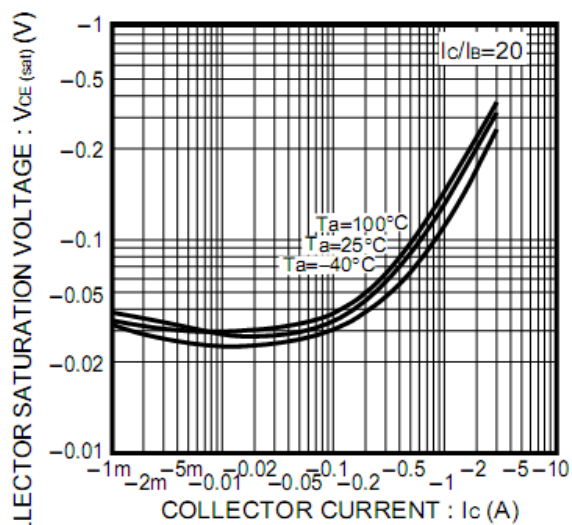


Fig.4 Collector-emitter saturation voltage vs. collector current

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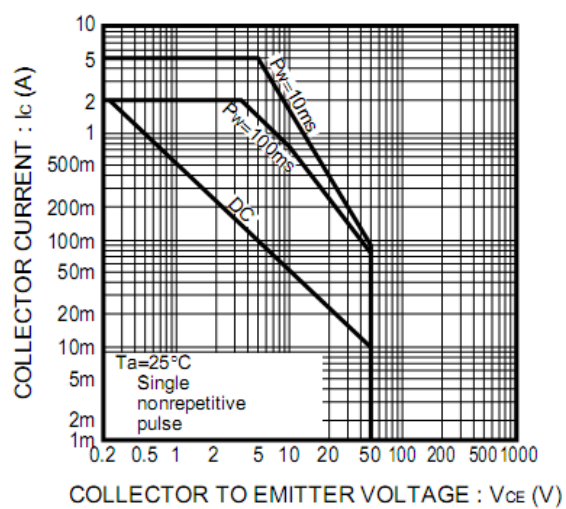


Fig.5 Safe operating area

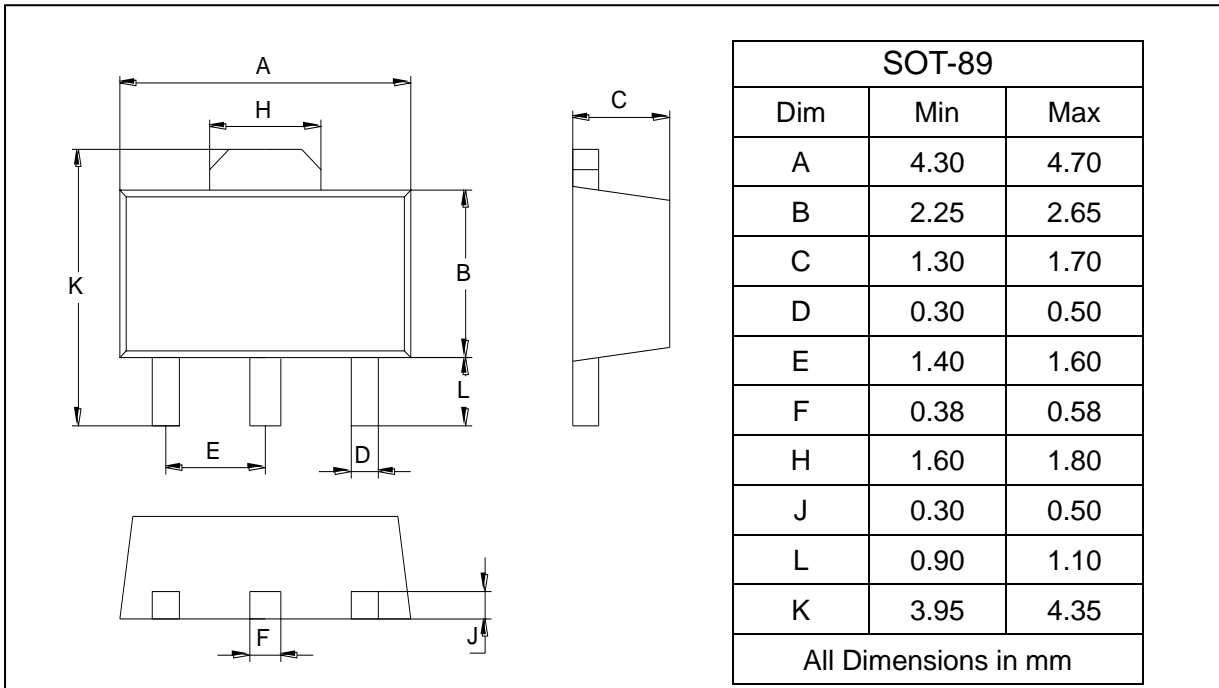
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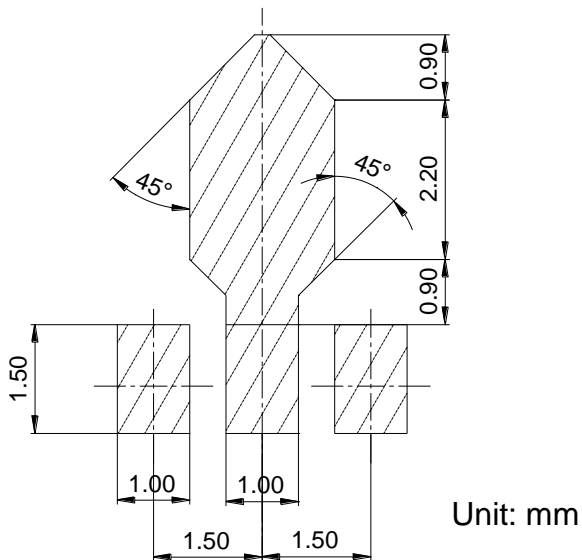
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-89



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
2SA1797	SOT-89	1000 pcs / Tape & Reel