

PNP Silicon Epitaxial Planar Transistor

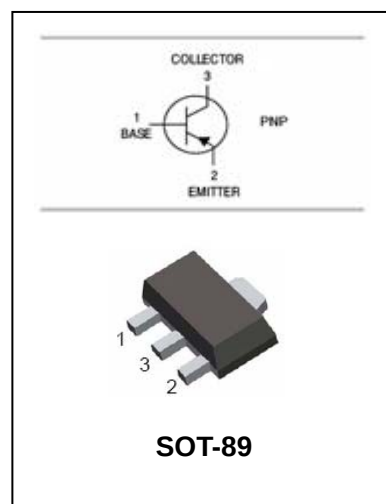
2SA1797

FEATURES

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



Lead-free



APPLICATIONS

- Low frequency transistor.

ORDERING INFORMATION

Type No.	Marking	Package Code
2SA1797	AG	SOT-89

MAXIMUM RATING @ $T_a = 25^\circ\text{C}$ 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 Pulse -2 -5	A
P_C	Collector Dissipation	500	mW
T_j, T_{stg}	Junction and Storage Temperature	-55 to +150	$^\circ\text{C}$

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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	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5V, I_C = 0$			-0.1	μA
DC current gain	h_{FE}	$V_{CE} = -2V, I_C = -500mA$	82		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

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

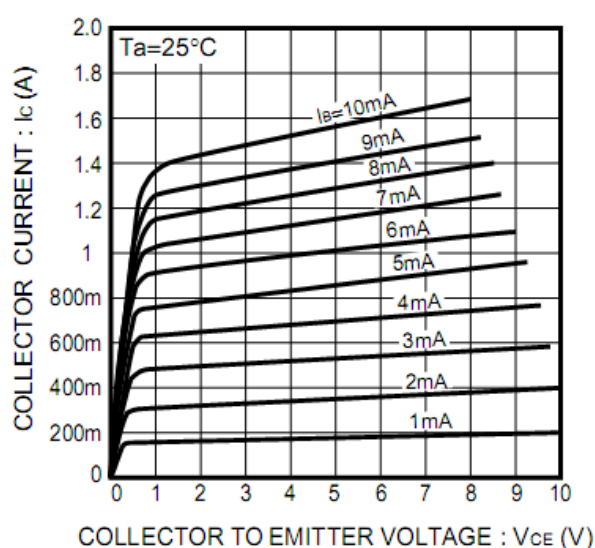


Fig.1 Grounded emitter output characteristics

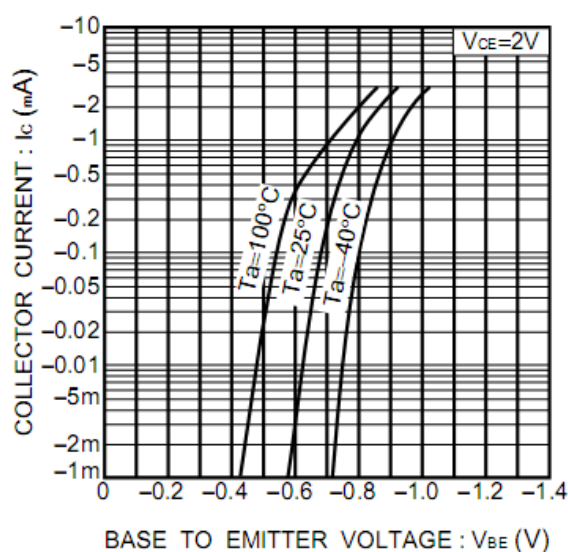


Fig.2 Grounded emitter propagation characteristics

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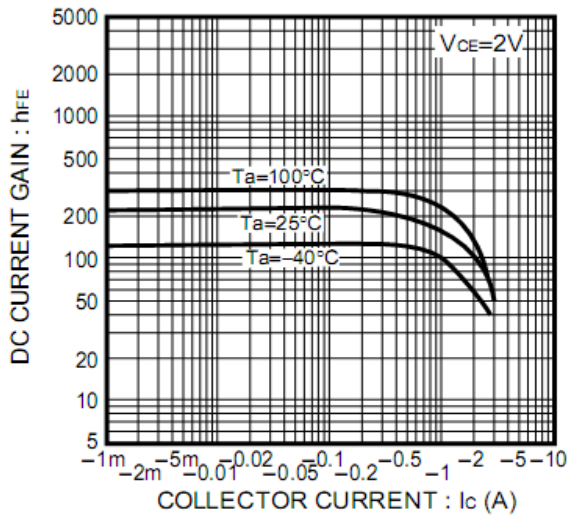


Fig.3 DC current gain vs. collector current

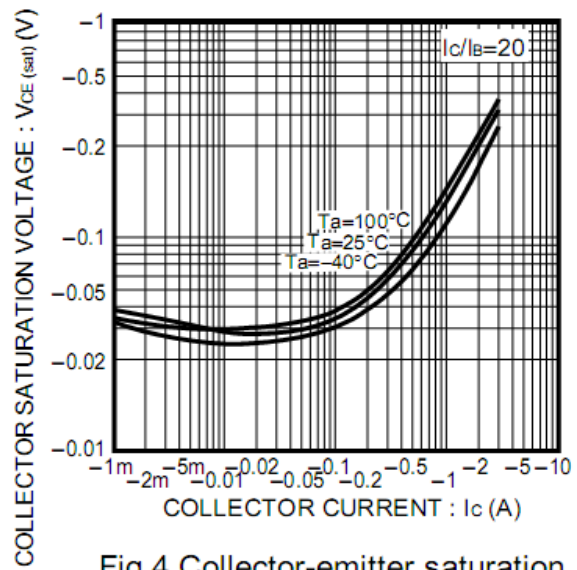


Fig.4 Collector-emitter saturation voltage vs. collector current

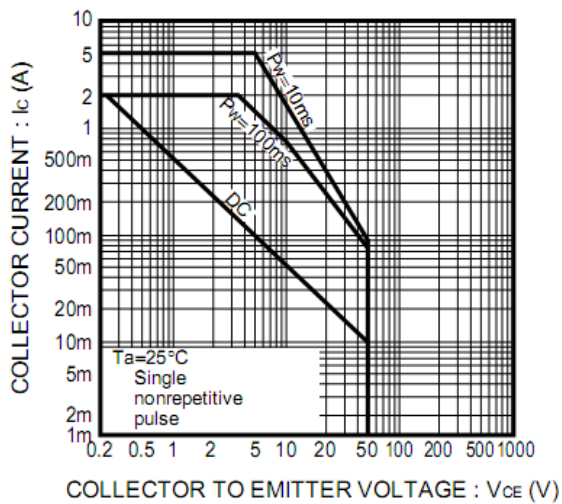


Fig.5 Safe operating area

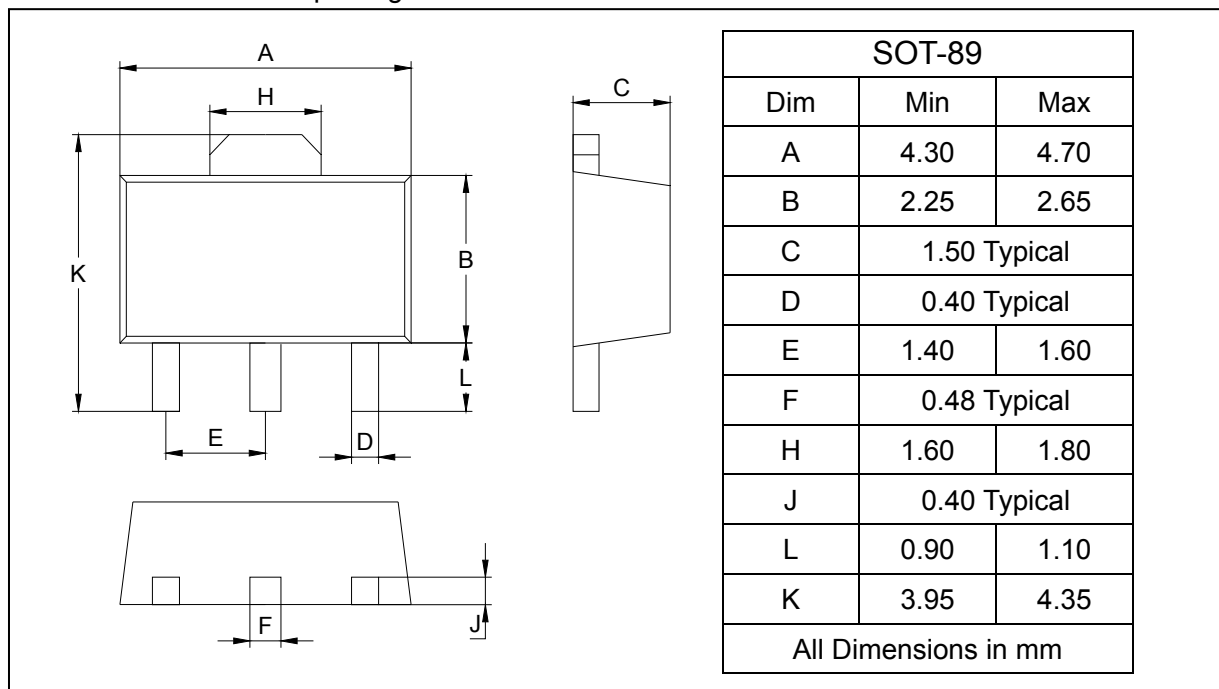
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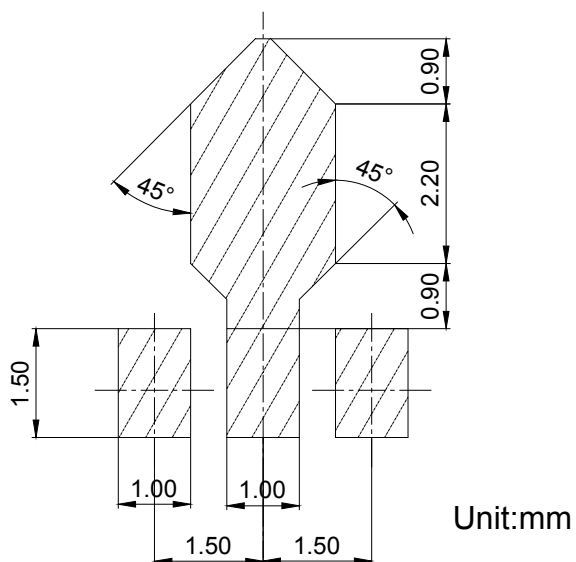
PACKAGE OUTLINE

Plastic surface mounted package

SOT-89



SOLDERING FOOTPRINT



PACKAGE INFORMATION

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