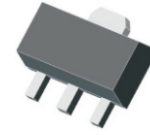


2SA1797-HF (PNP)

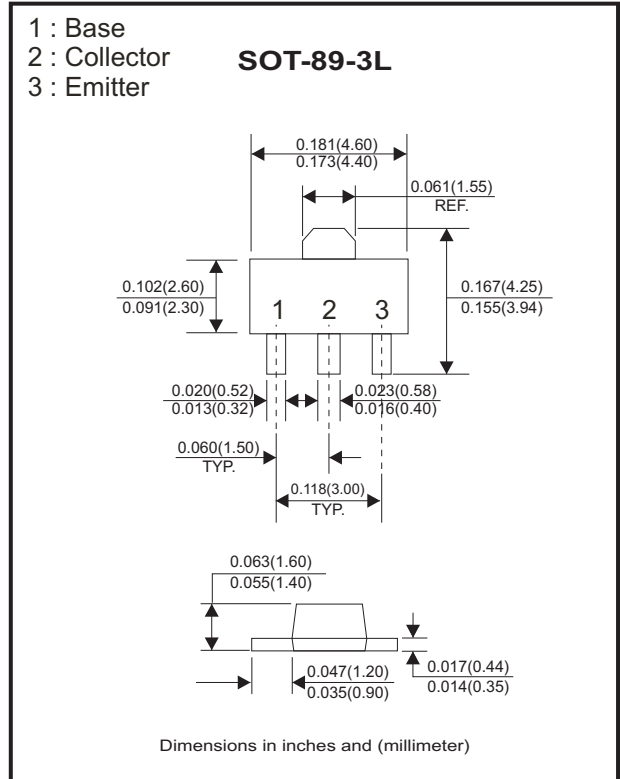
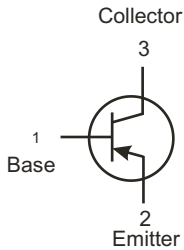
RoHS Device
Halogen Free



Features

- Low saturation voltage
- Excellent DC current gain characteristics
- Complements to 2SC4672-HF

Circuit diagram



Maximum Ratings (at TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-base voltage	V _{CB0}	-50	V
Collector-emitter voltage	V _{CEO}	-50	V
Emitter-base voltage	V _{EBO}	-6	V
Continuous collector current	I _C	-2	A
Peak pluse current	I _{CM}	-3	A
Collector power dissipation	P _C	500	mW
Junction temperature	T _J	150	°C
Storage temperature range	T _{stg}	-55~+150	°C

Electrical Characteristics (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Collector-base breakdown voltage	$I_C = -50\mu\text{A}, I_E = 0$	$V_{(BR)CBO}$	-50			V
Collector-emitter breakdown voltage	$I_C = -1\text{mA}, I_B = 0$	$V_{(BR)CEO}$	-50			V
Emitter-base breakdown voltage	$I_E = -50\mu\text{A}, I_C = 0$	$V_{(BR)EBO}$	-6			V
Collector cut-off current	$V_{CB} = -50\text{V}, I_E = 0$	I_{CBO}			-0.1	μA
Emitter cut-off current	$V_{EB} = -5\text{V}, I_C = 0$	I_{EBO}			-0.1	μA
DC current gain	$V_{CE} = -2\text{V}, I_C = -500\text{mA}$	h_{FE}	120		270	
Collector-emitter saturation voltage	$I_C = -1\text{A}, I_B = -50\text{mA}$	$V_{CE(sat)}$			-0.35	V
Transition frequency	$V_{CE} = -2\text{V}, I_C = -0.5\text{A}, f = 100\text{MHz}$	f_T		200		MHz
Collector output capacitance	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$	C_{ob}		36		pF

RATING AND CHARACTERISTIC CURVES (2SA1797-HF)

Fig.1 - Static Characteristic

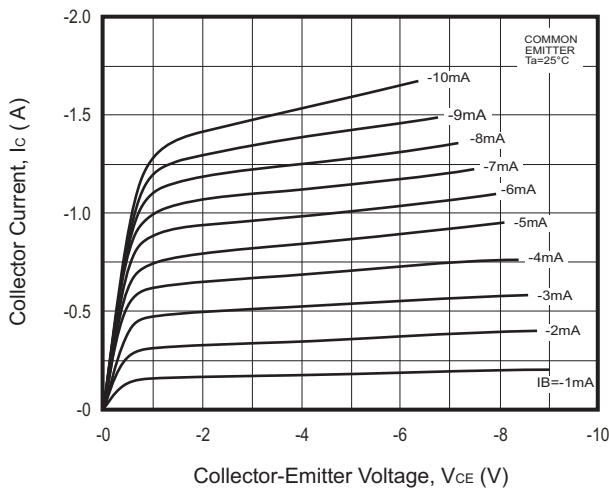
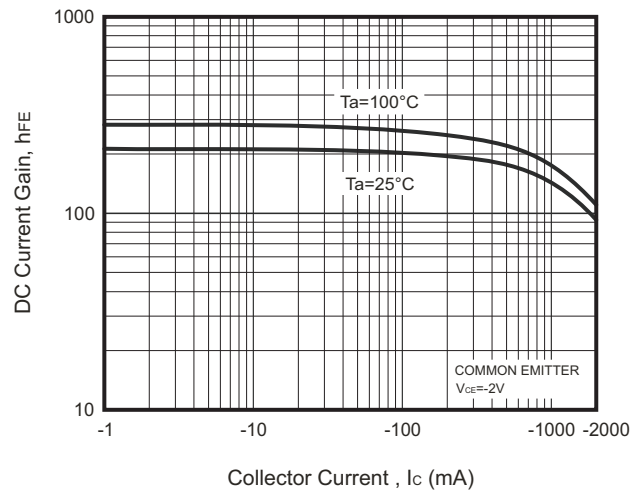


Fig.2 - $h_{FE}-I_C$



RATING AND CHARACTERISTIC CURVES (2SA1797-HF)

Fig.3 - $V_{BEsat} - I_c$

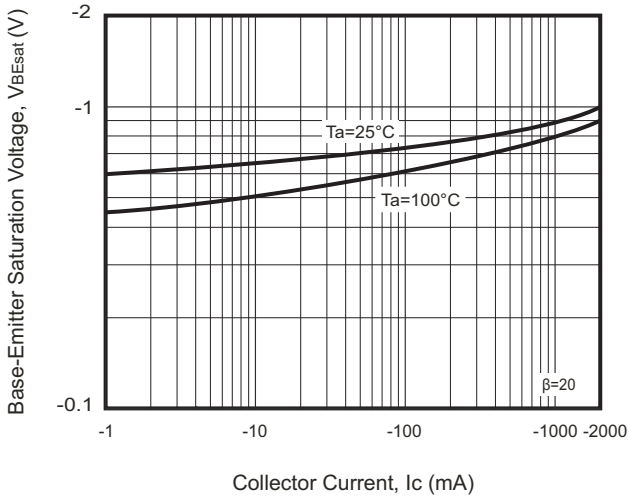


Fig.4 - $V_{CEsat} - I_c$

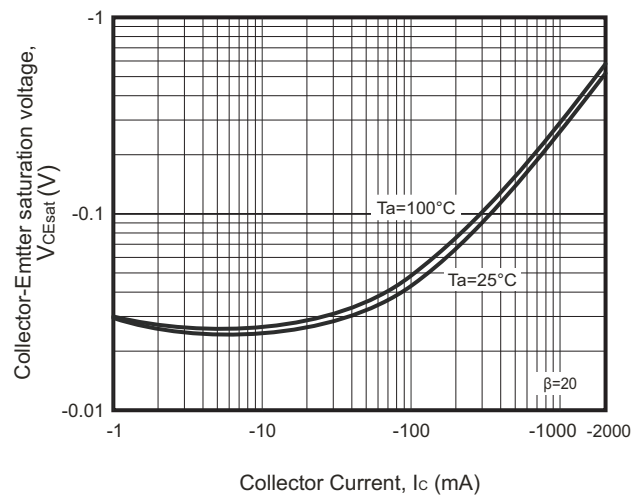


Fig.5 - $V_{BE} - I_c$

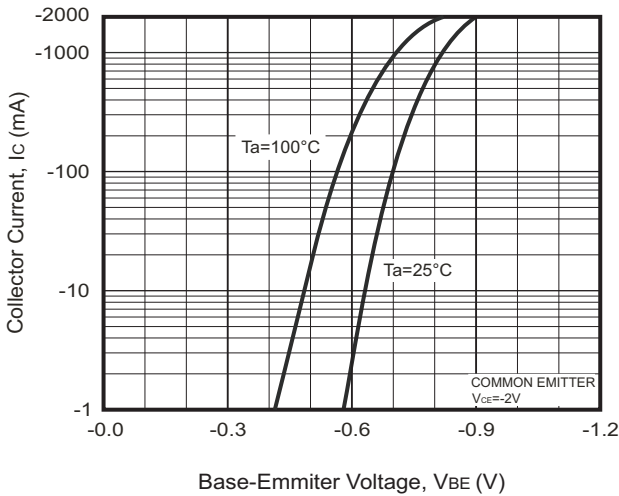


Fig.6 - $C_{ob}/C_{ib} - V_{CB}/V_{EB}$

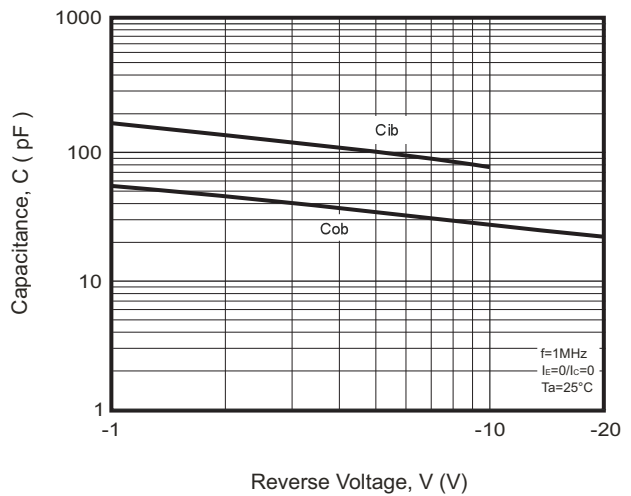


Fig.7 - $f_T - I_c$

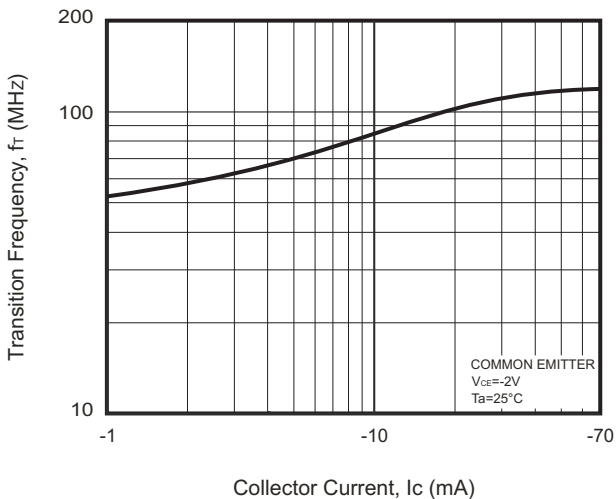
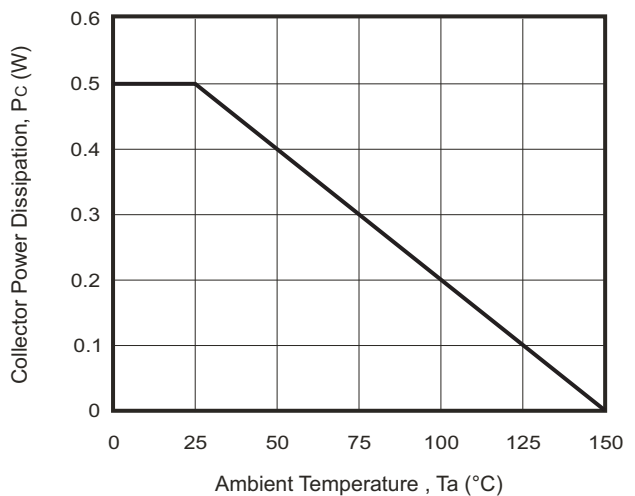
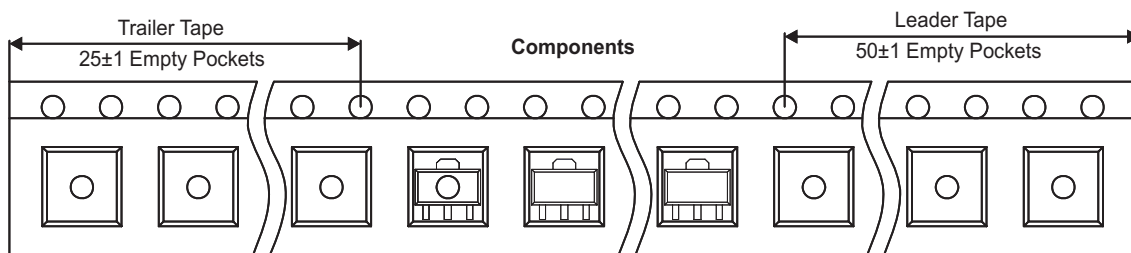
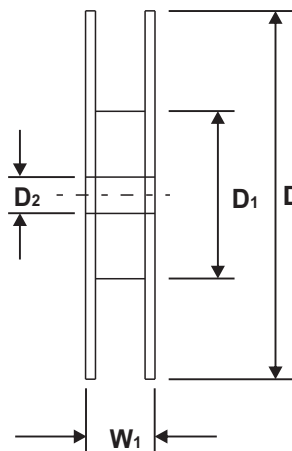
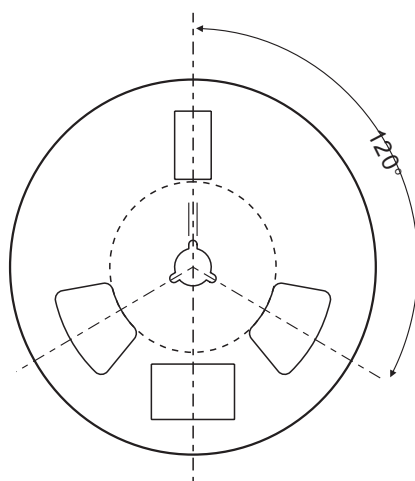
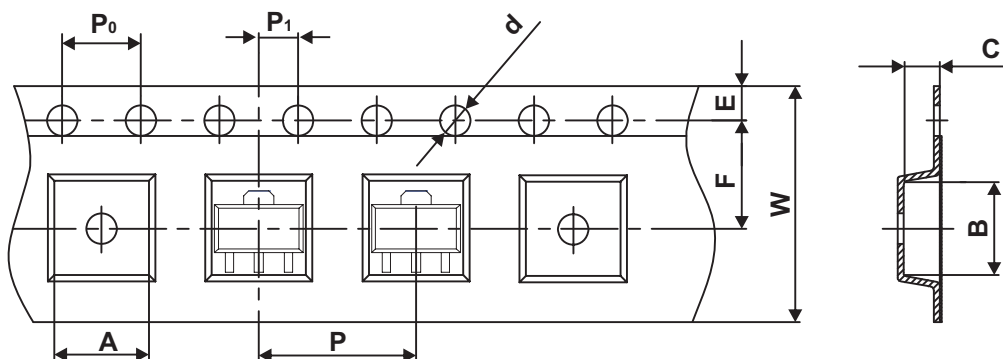


Fig.8 - $P_c - T_a$



Reel Taping Specification

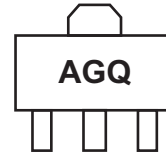


SOT-89-3L	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	4.85 ± 0.10	4.45 ± 0.10	1.85 ± 0.10	1.50 + 0.10	180 ± 2.00	60.00 ± 1.00	R32.00 ± 1.00
	(inch)	0.191 ± 0.004	0.175 ± 0.004	0.073 ± 0.004	0.059 + 0.004	7.087 ± 0.079	2.362 ± 0.039	1.260 ± 0.039

SOT-89-3L	SYMBOL	E	F	P	P ₀	P ₁	W	W ₁
	(mm)	1.75 ± 0.10	5.50 ± 0.10	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	12.00 + 0.30/-0.10	16.50 ± 1.00
	(inch)	0.069 ± 0.004	0.217 ± 0.004	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.472 + 0.012/-0.004	0.650 ± 0.039

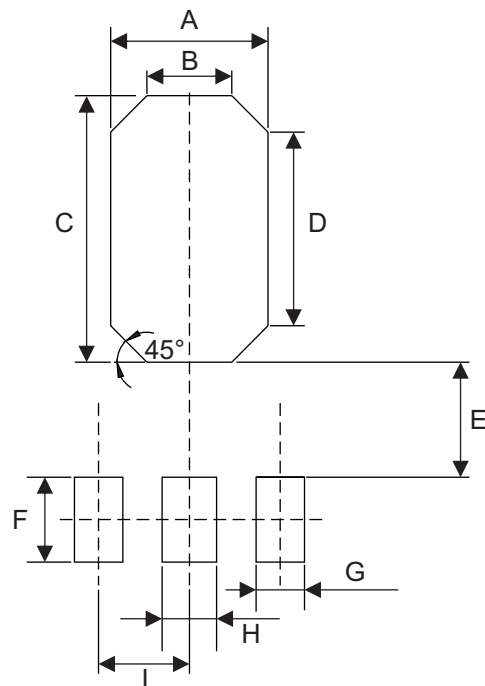
Marking Code

Part Number	Marking Code
2SA1797-HF	AGQ



Suggested PAD Layout

SIZE	SOT-89-3L	
	(mm)	(inch)
A	2.60	0.102
B	1.40	0.055
C	4.40	0.173
D	3.20	0.126
E	1.90	0.075
F	1.40	0.055
G	0.80	0.032
H	0.90	0.035
I	1.50	0.059



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-89-3L	1,000	7