

2SA1797

Transistor, PNP

Features

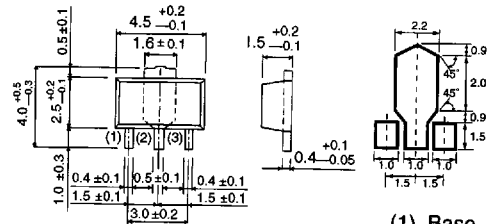
- available in MPT3 (MPT, SC-62) package
- package marking: 2SA1797; AG★, where ★ is h_{FE} code
- low collector saturation voltage, $V_{CE(sat)} = -0.35 \text{ V (max)}$ at $I_C/I_B = -1A/-50 \text{ mA}$
- excellent current to gain (h_{FE}) characteristics

Applications

- low frequency power amplifier

Dimensions (Units : mm)

2SA1797 (MPT3)



- (1) Base
- (2) Collector
- (3) Emitter

Absolute maximum ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit	Conditions
Collector-to-base voltage	V_{CBO}	-50	V	
Collector-to-emitter voltage	V_{CEO}	-50	V	
Emitter-to-base voltage	V_{EBO}	-6	V	
Collector current	I_C	-2	A	DC
		-5		Single pulse, $P_W = 10 \text{ ms}$
Collector dissipation	P_C	0.5	W	Mounted on $40 \times 40 \times 0.7 \text{ mm}$ ceramic PCB
		2.0		
Junction temperature	T_J	150	$^\circ\text{C}$	
Storage temperature	T_{stg}	-55 ~ +150	$^\circ\text{C}$	

2SA1797 Transistor, PNP, 2SA series

Electrical characteristics (unless otherwise noted, $T_a = 25^\circ\text{C}$)

Parameter	Symbol	Min	Typical	Max	Unit	Conditions
Collector-to-base breakdown voltage	BV_{CBO}	-50			V	$I_C = -50 \mu\text{A}$
Collector-to-emitter breakdown voltage	BV_{CEO}	-50			V	$I_C = -1 \text{ mA}$
Emitter-to-base breakdown voltage	BV_{EBO}	-6			V	$I_E = -50 \mu\text{A}$
Collector cutoff current	I_{CBO}			-0.1	μA	$V_{CB} = -50 \text{ V}$
Emitter cutoff current	I_{EBO}			-0.1	μA	$V_{EB} = -5 \text{ V}$
DC current gain	h_{FE}	82		270		$V_{CE} = -2 \text{ V}$, $I_C = -0.5 \text{ V}$, single pulse
Collector-to-emitter saturation voltage	$V_{CE(sat)}$		-0.15	-0.35	V	$I_C/I_B = -1\text{A}/-50 \text{ mA}$, single pulse
Transition frequency	f_T		200		MHz	$V_{CE} = -2 \text{ V}$, $I_E = 0.5 \text{ A}$, $f = 100 \text{ MHz}$ single pulse
Output capacitance	C_{ob}		36		pF	$V_{CB} = -10 \text{ V}$, $I_E = 0 \text{ mA}$, $f = 1 \text{ MHz}$

h_{FE} rankings

Item	P	Q
h_{FE}	82 ~ 180	120 ~ 270

Electrical characteristic curves

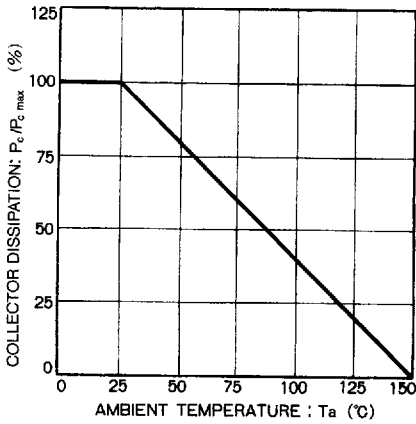


Figure 1

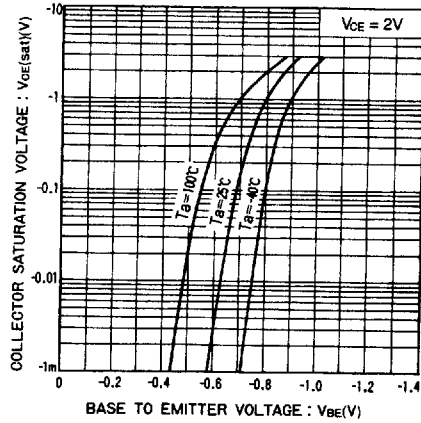


Figure 2

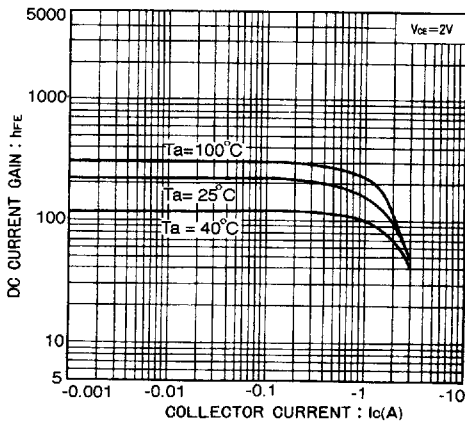


Figure 3

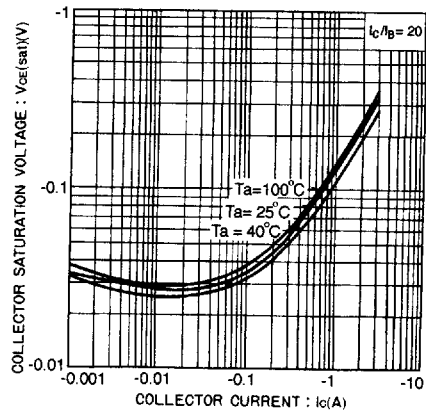


Figure 4

Ordering information

Package	Tape
Code	T100
Basic order quantity	1000
2SA1797	★
★ = Standard, ☆ = Semi-standard, * = Special order	