

2SB1392

**Silicon PNP Triple Diffused
Low Frequency Power Amplifier**

Absolute Maximum Ratings (Ta = 25°C)

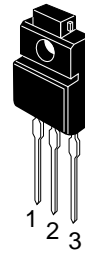
Item	Symbol	Rating	Unit
Collector to base voltage	V _{CBO}	-70	V
Collector to emitter voltage	V _{CEO}	-60	V
Emitter to base voltage	V _{EBO}	-5	V
Collector current	I _C	-4	A
Collector peak current	i _{C(peak)}	-8	A
Collector power dissipation	P _C	2	W
	P _C ^{*1}	25	
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

Note: 1. Value at T_C = 25°C.

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test condition
Collector to base breakdown voltage	V _{(BR)CBO}	-70	—	—	V	I _C = -10 μA, I _E = 0
Collector to emitter breakdown voltage	V _{(BR)CEO}	-60	—	—	V	I _C = -50 mA, R _{BE} = ∞
Emitter to base breakdown voltage	V _{(BR)EBO}	-5	—	—	V	I _E = -10 μA, I _C = 0
Collector cutoff current	I _{CBO}	—	—	-10	μA	V _{CB} = -50 V, I _E = 0
	I _{CEO}	—	—	-10		V _{CE} = -50 V, R _{BE} = ∞
DC current transfer ratio	h _{FE1} ^{*2}	60	—	200		V _{CE} = -4 V, I _C = -1 A ^{*1}
	h _{FE2}	35	—	—		V _{CE} = -4 V, I _C = -0.1 A ^{*1}
Base to emitter voltage	V _{BE}	—	—	-1.0	V	V _{CE} = -4 V, I _C = -1 A ^{*1}
Collector to emitter saturation voltage	V _{CE(sat)}	—	—	-1.0	V	I _C = -2.0 A, I _B = -0.2 A ^{*1}

TO-220 FM



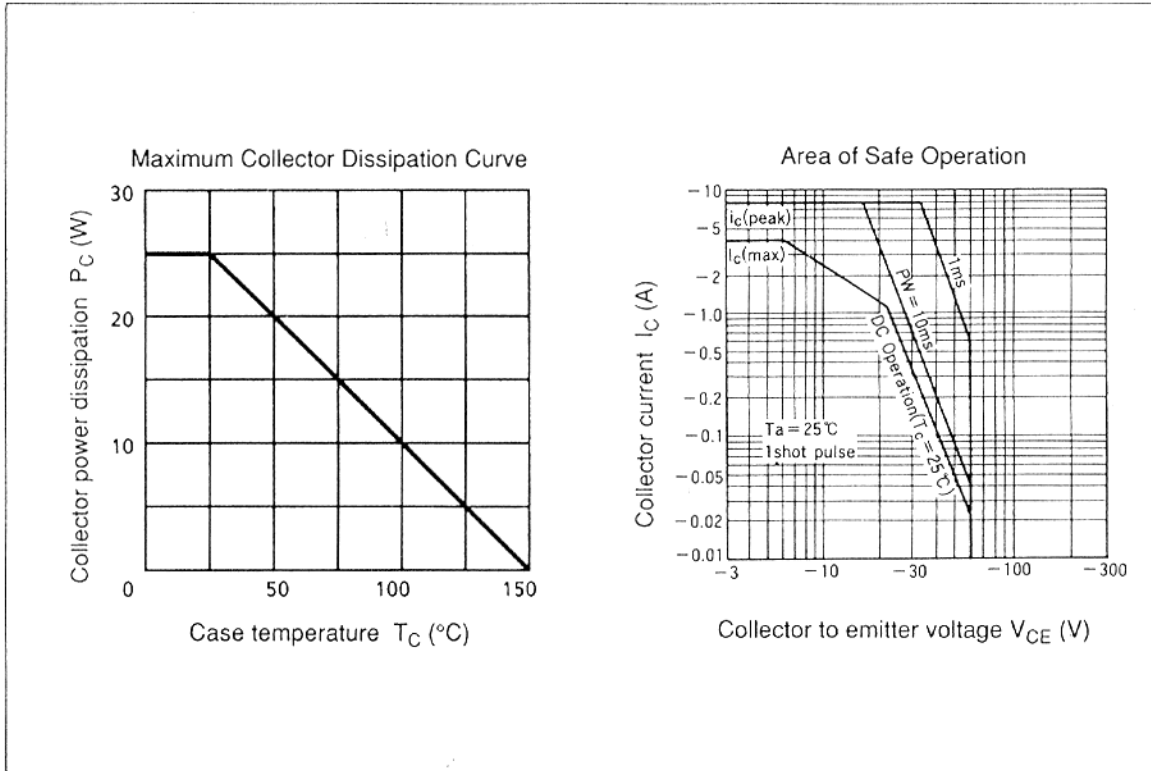
1. Base
2. Collector
3. Emitter

Electrical Characteristics (Ta = 25°C) (cont)

Item	Symbol	Min	Typ	Max	Unit	Test condition
Base to emitter saturation voltage	$V_{BE(sat)}$	—	—	-1.2	V	$I_C = -2.0$ A, $I_B = -0.2$ A ⁻¹

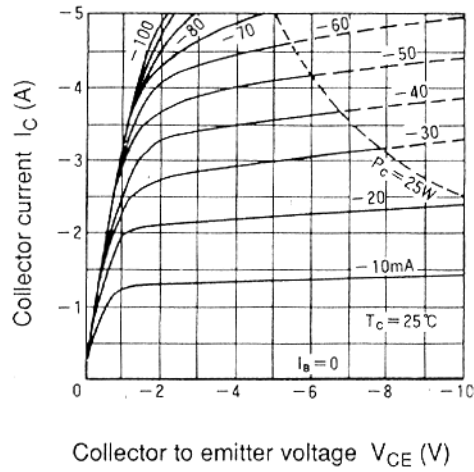
Notes: 1. Pulse Test.
 2. The 2SB1392 is grouped by h_{FE1} as follows.

B	C
60 to 120	100 to 200

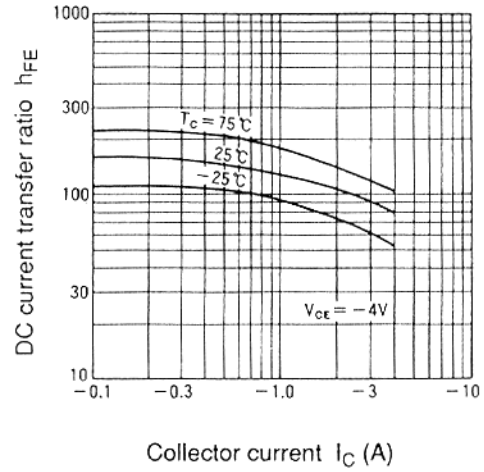


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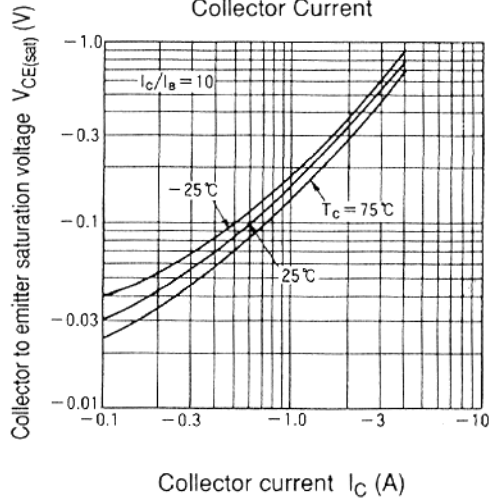
Typical Output Characteristics



DC Current Transfer Ratio vs. Collector Current



Saturation Voltage vs. Collector Current



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