

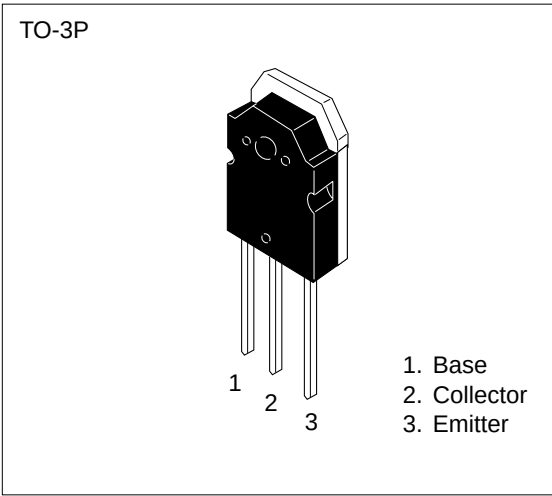
2SD2342

Silicon NPN Triple Diffused
Low Frequency Power Amplifier

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Rating	Unit
Collector to base voltage	V _{CBO}	150	V
Collector to emitter voltage	V _{CEO}	80	V
Emitter to base voltage	V _{EBO}	6	V
Collector current	I _C	6	A
Collector peak current	i _{C(peak)}	10	A
Collector power dissipation	P _C ^{*1}	50	W
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	−55 to +150	°C

Note: 1. Value at T_C = 25°C.



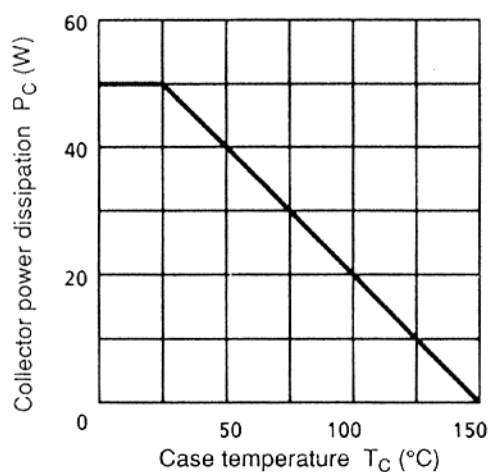
Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test condition
Collector to base breakdown voltage	V _{(BR)CBO}	150	—	—	V	I _C = 5 mA, I _E = 0
Collector to emitter breakdown voltage	V _{(BR)CEO}	80	—	—	V	I _C = 50 mA, R _{BE} = ∞
Emitter to base breakdown voltage	V _{(BR)EBO}	6	—	—	V	I _E = 5 mA, I _C = 0
Collector cutoff current	I _{CBO}	—	—	10	μA	V _{CB} = 120 V, I _E = 0
DC current transfer ratio	h _{FE1} ^{*1}	60	—	200		V _{CE} = 5 V, I _C = 1A
	h _{FE2}	22	—	—		V _{CE} = 5 V, I _C = 5A
Base to emitter voltage	V _{BE}	—	—	1.0	V	V _{CE} = 5 V, I _C = 1A
Collector to emitter saturation voltage	V _{CE (sat)}	—	—	1.5	V	I _C = 5 A, I _B = 1A

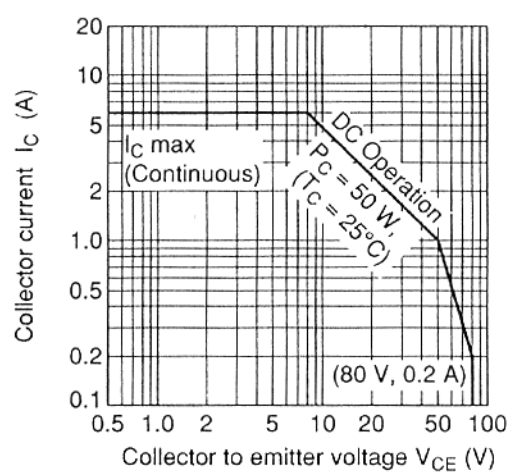
Note: 1. The 2SD2342 is grouped by h_{FE1} as follows.

B	C
60 to 120	100 to 200

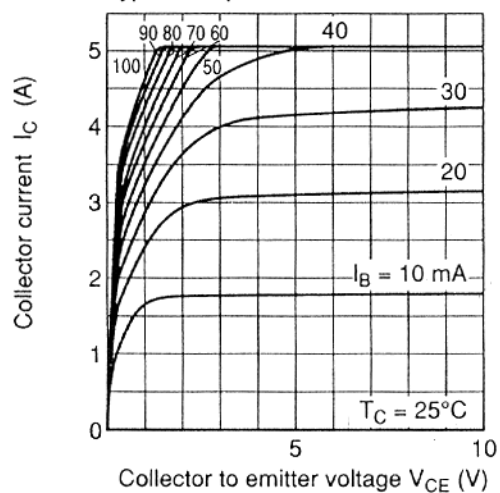
Maximum Collector Dissipation Curve



Area of Safe Operation



Typical Output Characteristics



Typical Transfer Characteristics

