

2SD2115(L) / (S)

Silicon NPN Epitaxial Planar
Low Frequency Power Amplifier

Absolute Maximum Ratings (Ta = 25°C)

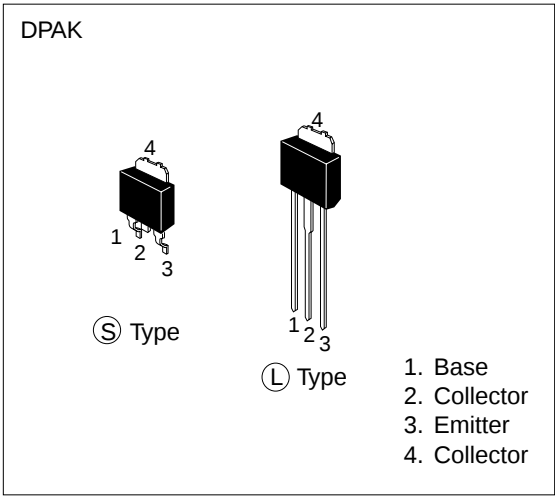
Item	Symbol	Rating	Unit
Collector to base voltage	V _{CBO}	150	V
Collector to emitter voltage	V _{CEO}	60	V
Emitter to base voltage	V _{EBO}	5	V
Collector current	I _C	2	A
Collector peak current	i _{C(peak)}	2.5	A
Collector power dissipation	P _C ^{*1}	18	W
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	−55 to +150	°C

Note: 1. Value at T_C = 25°C.

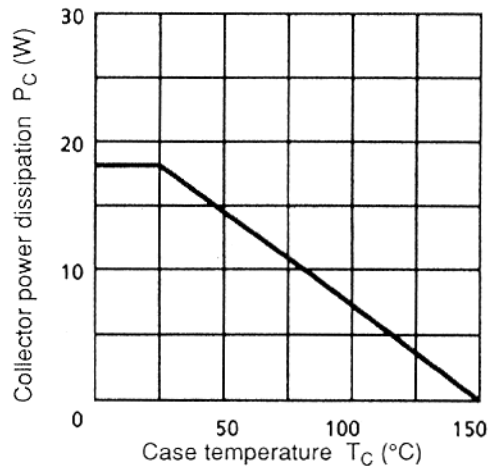
Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test condition
Collector to base breakdown voltage	V _{(BR)CBO}	150	—	—	V	I _C = 1 mA, I _E = 0
Collector to emitter breakdown voltage	V _{(BR)CEO}	60	—	—	V	I _C = 10 mA, R _{BE} = ∞
Emitter to base breakdown voltage	V _{(BR)EBO}	5	—	—	V	I _E = 1 mA, I _C = 0
Collector cutoff current	I _{CBO}	—	—	10	μA	V _{CB} = 100 V, I _E = 0
DC current transfer ratio	h _{FE}	150	—	—		V _{CE} = 5 V, I _C = 1.5 A ^{*1}
Collector to emitter saturation voltage	V _{CE(sat)}	—	—	0.8	V	I _C = 1.5 A, I _B = 0.05 A ^{*1}
Base to emitter saturation voltage	V _{BE(sat)}	—	—	1.3	V	I _C = 1.5 A, I _B = 0.05 A ^{*1}
Fall time	t _f	—	—	0.6	μs	I _C = 1.5 A, I _{B1} = −I _{B2} = 50 mA

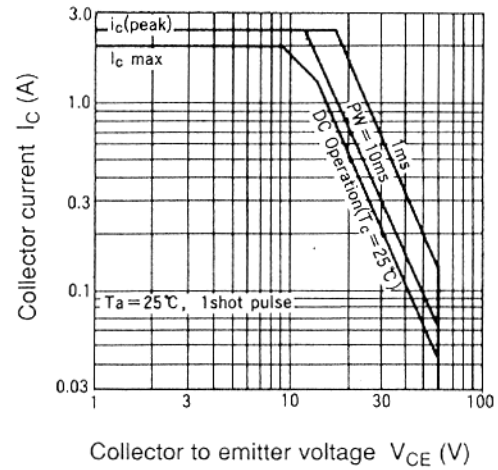
Note: 1. Pulse Test.



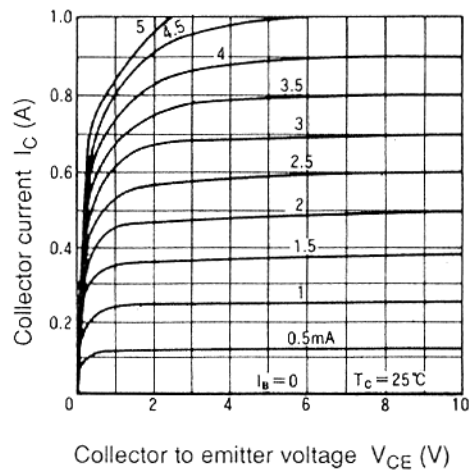
Maximum Collector Dissipation Curve



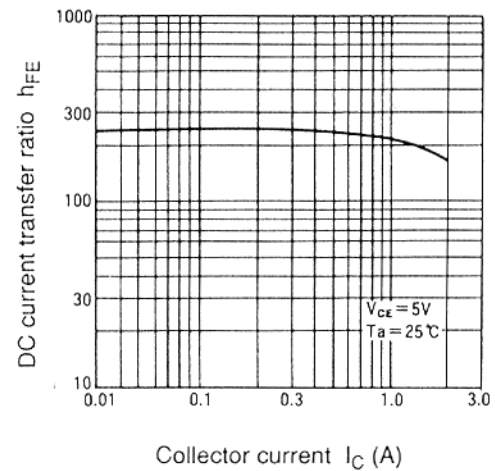
Area of Safe Operation



Typical Output Characteristics



DC Current Transfer Ratio vs. Collector Current



2SD2115 (L/S)

