

2SD2337

**Silicon NPN Triple Diffused
Low Frequency High Voltage Power Amplifier
TV Vertical Deflection Output
Complementary Pair with 2SB1530**

Absolute Maximum Ratings (Ta = 25°C)

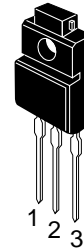
Item	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	200	V
Collector to emitter voltage	V_{CEO}	150	V
Emitter to base voltage	V_{EBO}	6	V
Collector current	I_C	2	A
Collector peak current	$i_{C(peak)}$	5	A
Collector power dissipation	P_C	1.5	W
	P_C^{*1}	20	
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-45 to +150	°C

Note: 1. Value at $T_C = 25^\circ\text{C}$.

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test condition
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	150	—	—	V	$I_C = 50\text{ mA}$, $R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	6	—	—	V	$I_E = 5\text{ mA}$, $I_C = 0$
Collector cutoff current	I_{CBO}	—	—	1	μA	$V_{CB} = 120\text{ V}$, $I_E = 0$
DC current transfer ratio	h_{FE1}^{*1}	60	—	320		$V_{CE} = 4\text{ V}$, $I_C = 50\text{ mA}$
	h_{FE2}	60	—	—		$V_{CE} = 10\text{ V}$, $I_C = 500\text{ mA}^{*2}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	3.0	V	$I_C = 500\text{ mA}$, $I_B = 50\text{ mA}^{*2}$

TO-220 FM



1. Base
2. Collector
3. Emitter

2SD2337

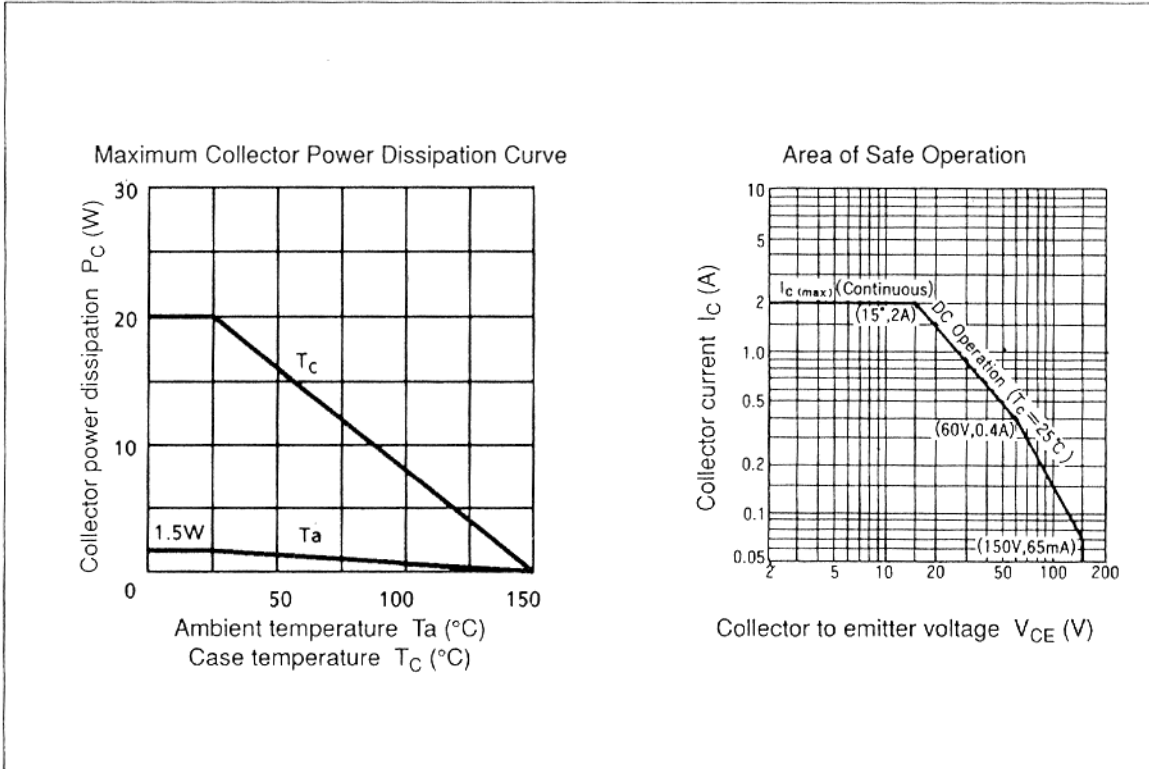
Electrical Characteristics ($T_a = 25^\circ\text{C}$) (cont)

Item	Symbol	Min	Typ	Max	Unit	Test condition
Base to emitter voltage	V_{BE}	—	—	1.0	V	$V_{CE} = 4\text{ V}, I_C = 50\text{ mA}$

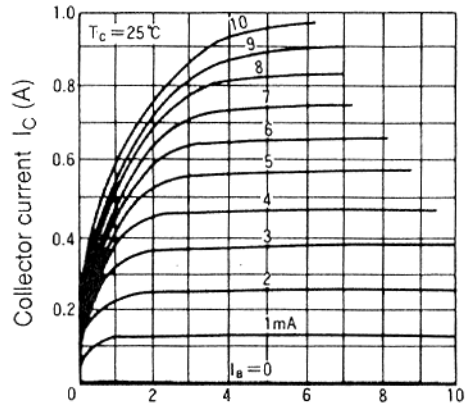
Notes: 1. The 2SD2337 is grouped by h_{FE1} as follows.

B	C	D
60 to 120	100 to 200	160 to 320

2. Pulse Test.

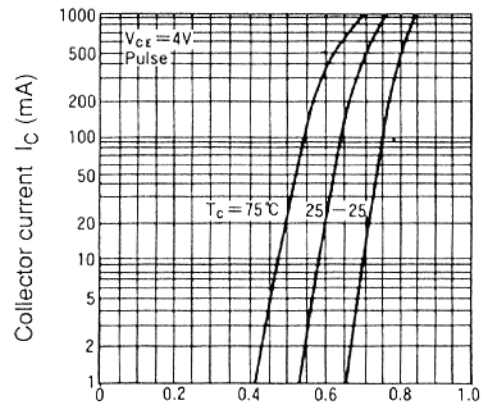


Typical Output Characteristics



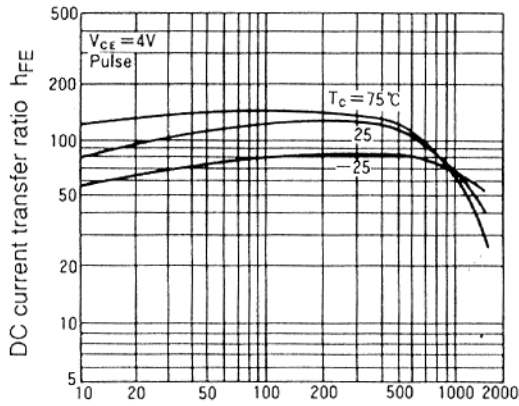
Collector to emitter voltage V_{CE} (V)

Typical Transfer Characteristics



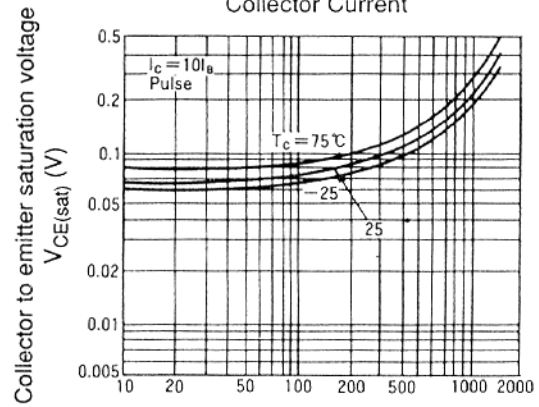
Base to emitter voltage V_{BE} (V)

DC Current Transfer Ratio vs. Collector Current



Collector current I_C (mA)

Collector to Emitter Saturation Voltage vs. Collector Current



Collector current I_C (mA)