

## 2SC4828

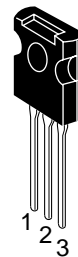
Silicon NPN Triple Diffused  
High Voltage Amplifier, TV Video Output

### Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Rating	Unit
Collector to base voltage	V <sub>CBO</sub>	300	V
Collector to emitter voltage	V <sub>CEO</sub>	300	V
Emitter to base voltage	V <sub>EBO</sub>	5	V
Collector current	I <sub>C</sub>	100	mA
Collector power dissipation	P <sub>C</sub>	1.5	W
	P <sub>C</sub> <sup>*1</sup>	8	
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

Note: 1. Value at T<sub>C</sub> = 25°C.

TO-126FM



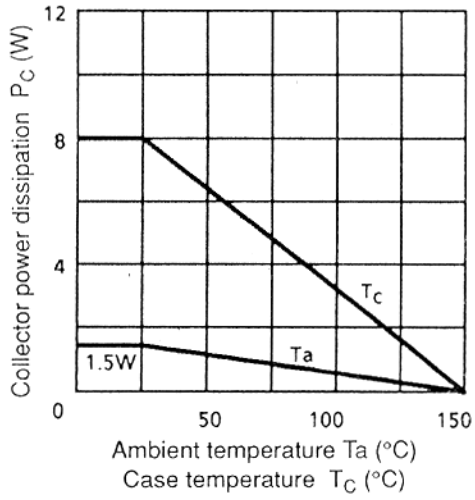
1. Emitter
2. Collector
3. Base

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

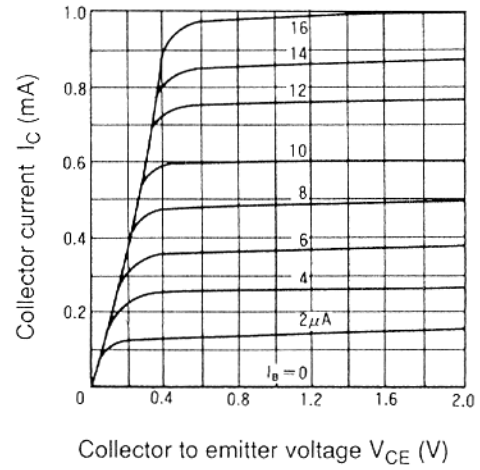
Item	Symbol	Min	Typ	Max	Unit	Test condition
Collector to base breakdown voltage	V <sub>(BR)CBO</sub>	300	—	—	V	I <sub>C</sub> = 10 μA, I <sub>E</sub> = 0
Collector to emitter breakdown voltage	V <sub>(BR)CEO</sub>	300	—	—	V	I <sub>C</sub> = 1 mA, R <sub>BE</sub> = ∞
Emitter to base breakdown voltage	V <sub>(BR)EBO</sub>	5	—	—	V	I <sub>E</sub> = 10 μA, I <sub>C</sub> = 0
Collector cutoff current	I <sub>CEO</sub>	—	—	1.0	μA	V <sub>CE</sub> = 250 V, R <sub>BE</sub> = ∞
DC current transfer ratio	h <sub>FE</sub>	40	—	200	—	V <sub>CE</sub> = 20 V, I <sub>C</sub> = 20 mA
Base to emitter voltage	V <sub>BE</sub>	—	—	1.0	V	V <sub>CE</sub> = 20 V, I <sub>C</sub> = 20 mA
Collector to emitter saturation voltage	V <sub>CE(sat)</sub>	—	—	1.5	V	I <sub>C</sub> = 20 mA, I <sub>B</sub> = 2 mA
Gain bandwidth product	f <sub>T</sub>	50	80	—	MHz	V <sub>CE</sub> = 20 V, I <sub>C</sub> = 20 mA
Collector Output Capacitance	C <sub>ob</sub>	—	—	4.0	pF	V <sub>CB</sub> = 20 V, I <sub>E</sub> = 0, f = 1 MHz

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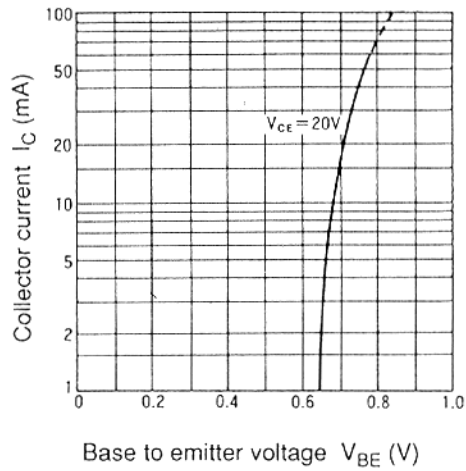
Maximum Collector Dissipation Curve



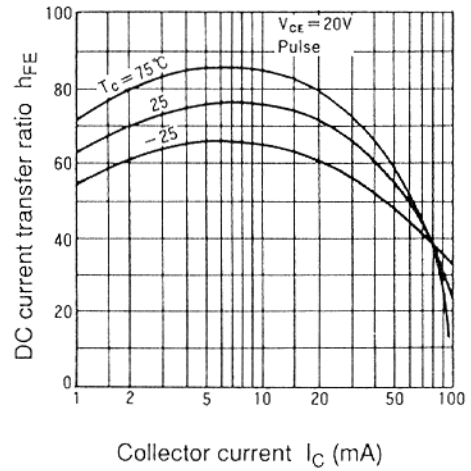
Typical Output Characteristics



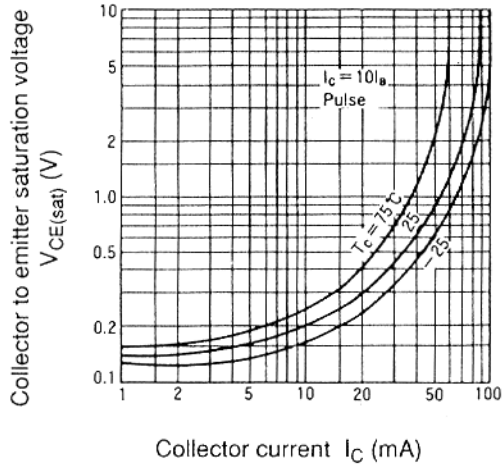
Typical Transfer Characteristics



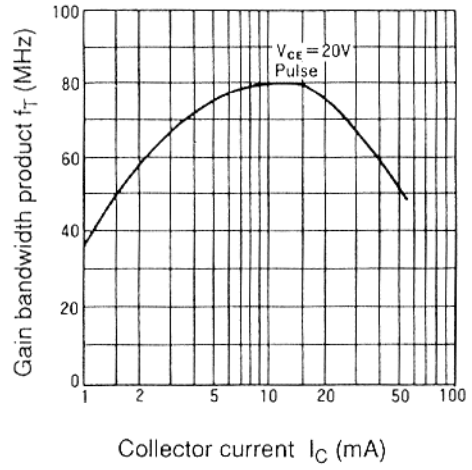
DC Current Transfer Ratio vs. Collector Current



Collector to Emitter Saturation Voltage vs. Collector Current



Gain Bandwidth Product vs. Collector Current



Collector Output Capacitance vs. Collector to Base Voltage

