TOSHIBA Transistor Silicon PNP Epitaxial Type (PCT Process)

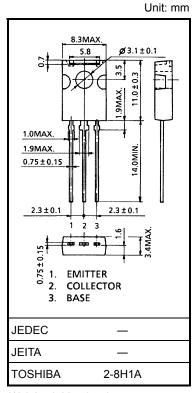
# 2SA1408

## Color TV Vertical Deflection Output Applications Color TV Class-B Sound Output Applications

- Large collector current and collector power dissipation capability
- Recommended for vertical deflection output and sound output applications for line-operated TV.
- Complementary to 2SC3621

#### **Maximum Ratings (Tc = 25°C)**

Characteristics		Symbol	Rating	Unit	
Collector-base voltage		V <sub>CBO</sub>	-150	V	
Collector-emitter voltage		V <sub>CEO</sub>	-150	V	
Emitter-base voltage		V <sub>EBO</sub>	-6	٧	
Collector current		I <sub>C</sub>	-1.5	Α	
Base current		Ι <sub>Β</sub>	-1.0	Α	
Collector power dissipation	Ta = 25°C	Pc	1.5	W	
	Tc = 25°C	1 0	10		
Junction temperature		Tj	150	°C	
Storage temperature range		T <sub>stg</sub>	-55 to 150	°C	



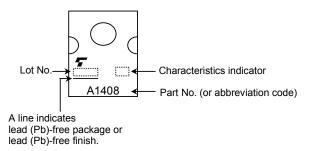
Weight: 0.82 g (typ.)

### **Electrical Characteristics (Tc = 25°C)**

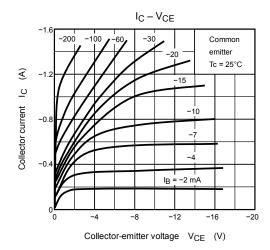
Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> = -150 V, I <sub>E</sub> = 0	_	_	-1.0	μΑ
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = -6 V, I <sub>C</sub> = 0	_	_	-1.0	μΑ
Collector-emitter breakdown voltage	V (BR) CEO	I <sub>C</sub> = -10 mA, I <sub>B</sub> = 0	-150	_	_	V
DC current gain	h <sub>FE</sub> (Note)	V <sub>CE</sub> = -5 V, I <sub>C</sub> = -200 mA	60	_	200	
Collector-emitter saturation voltage	V <sub>CE (sat)</sub>	$I_C = -500 \text{ mA}, I_B = -50 \text{ mA}$	_	_	-1.5	V
Base-emitter voltage	V <sub>BE</sub>	$V_{CE} = -5 \text{ V}, I_{C} = -5 \text{ mA}$	-0.5	_	-0.8	V
Transition frequency	f <sub>T</sub>	$V_{CE} = -5 \text{ V, } I_{C} = -200 \text{ mA}$	15	50	_	MHz
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -10 V, I <sub>E</sub> = 0, f = 1 MHz	_	_	35	pF

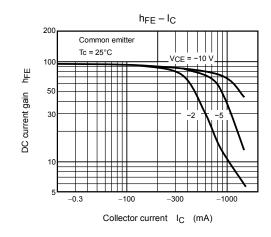
Note: hFE classification R: 60 to 120, O: 100 to 200

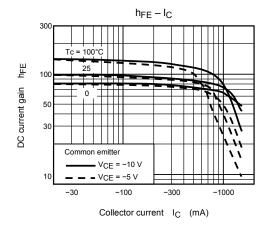
# Marking

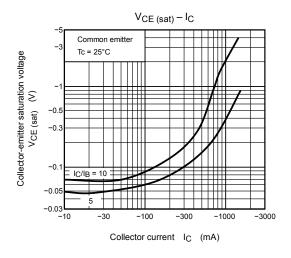


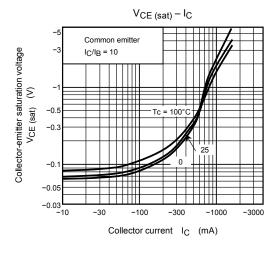
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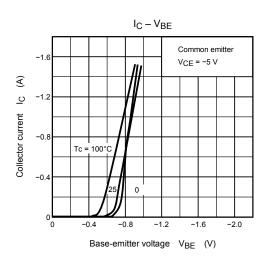


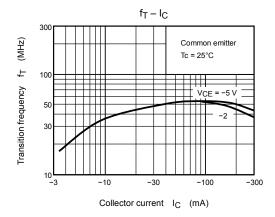


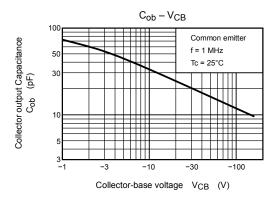


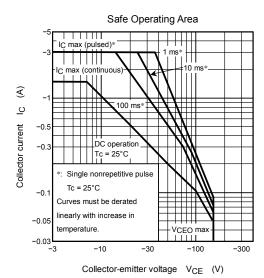












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