

2SC5207A

Silicon NPN Triple Diffused Planar

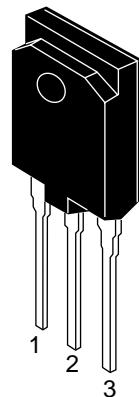
Application

Character display horizontal deflection output

Features

- High speed switching
 $t_f = 0.2 \mu\text{sec}(\text{typ})$
- Wide drive current capability

TO-3PFM (N)



1. Base
2. Collector
3. Emitter

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

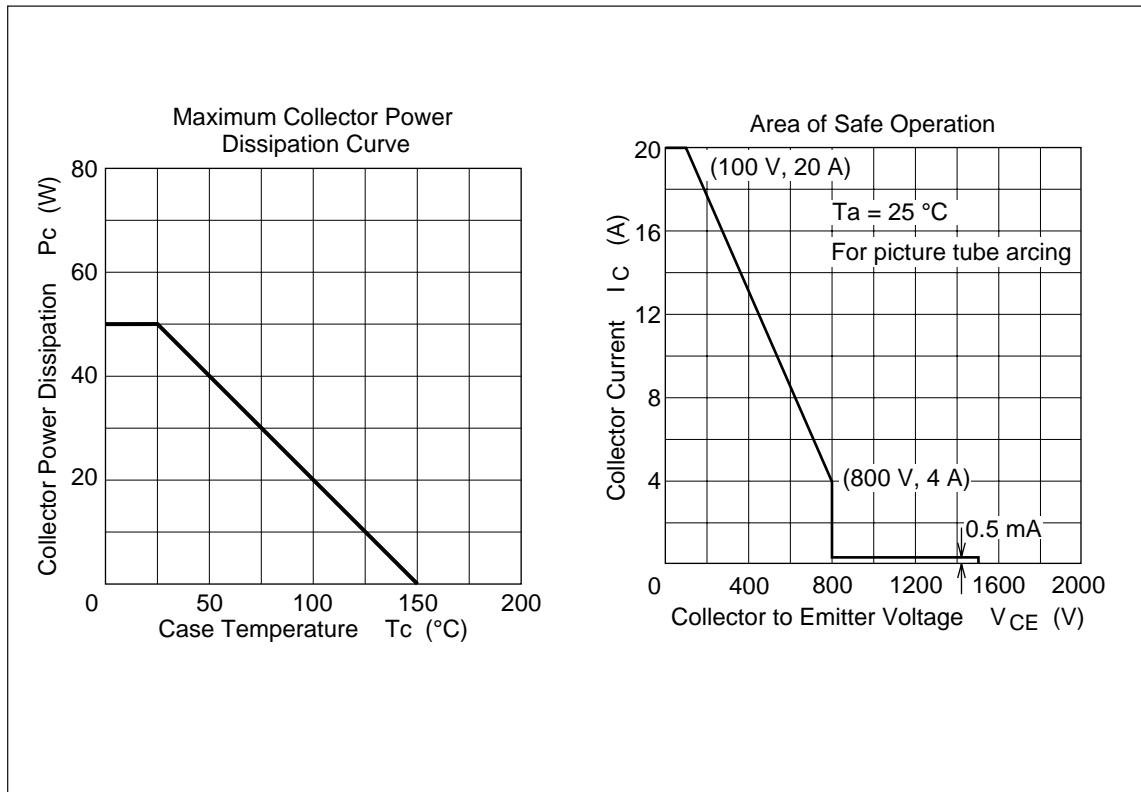
Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	1500	V
Collector to emitter voltage	V_{CEO}	800	V
Emitter to base voltage	V_{EBO}	6	V
Collector current	I_C	10	A
Collector surge current	$i_c(\text{surge})$	20	A
Collector power dissipation	P_C^{*1}	50	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

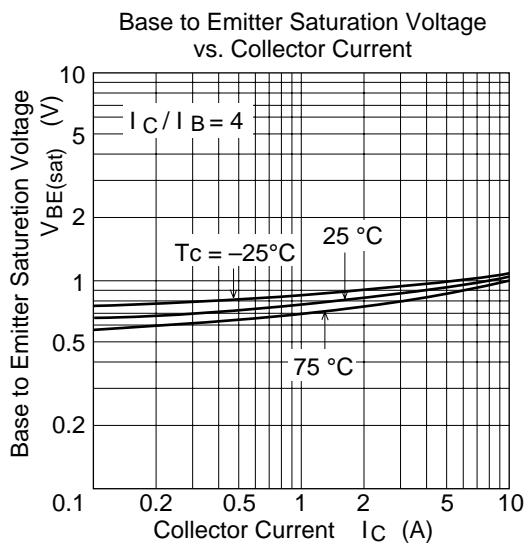
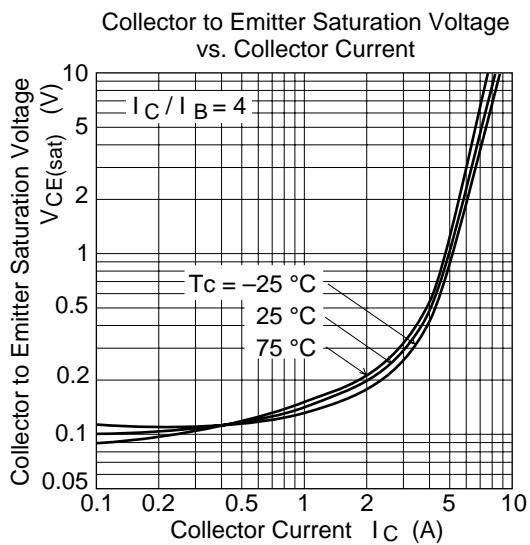
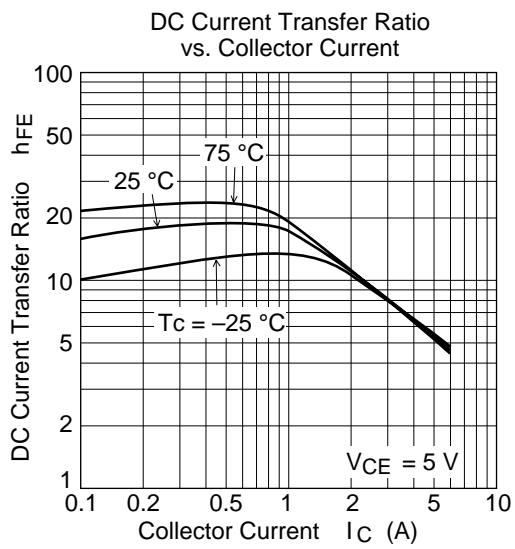
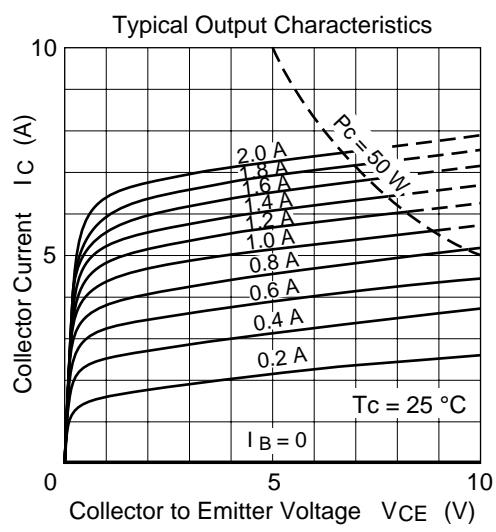
Note: 1. Value at $T_c = 25^\circ\text{C}$

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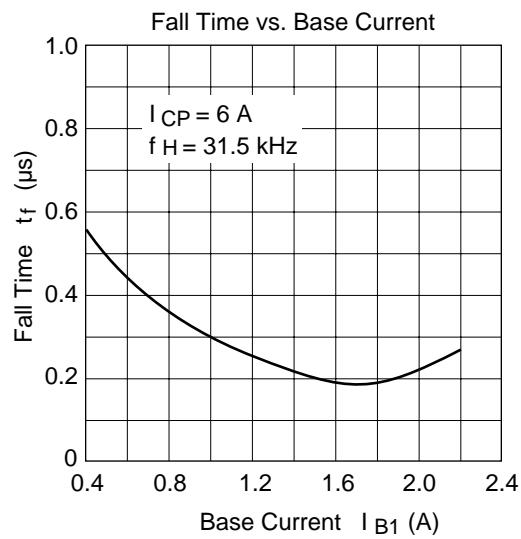
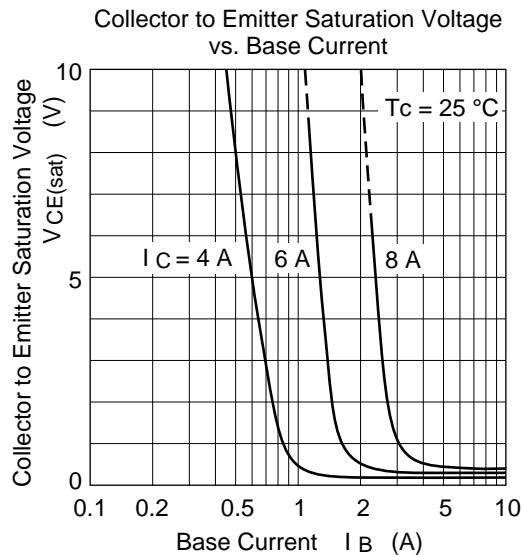
Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to emitter breakdown voltage	$V_{(\text{BR})\text{CEO}}$	800	—	—	V	$I_C = 10 \text{ mA}$, $R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(\text{BR})\text{EBO}}$	6	—	—	V	$I_E = 10 \text{ mA}$, $I_C = 0$
Collector cutoff current	I_{CES}	—	—	500	μA	$V_{CE} = 1500 \text{ V}$, $R_{BE} = 0$
DC current transfer ratio	h_{FE1}	8	—	30		$V_{CE} = 5 \text{ V}$, $I_C = 1 \text{ A}$
DC current transfer ratio	h_{FE2}	4	—	7		$V_{CE} = 5 \text{ V}$, $I_C = 5 \text{ A}$
Collector to emitter saturation voltage	$V_{CE(\text{sat})}$	—	—	5	V	$I_C = 6 \text{ A}$, $I_B = 1.6 \text{ A}$
Base to emitter saturation voltage	$V_{BE(\text{sat})}$	—	—	1.5	V	$I_C = 6 \text{ A}$, $I_B = 1.6 \text{ A}$
Fall time	t_f	—	0.2	0.4	μsec	$I_{CP} = 6 \text{ A}$, $I_{B1} = 1.5 \text{ A}$, $f_H = 31.5 \text{ kHz}$





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Package Outline

