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# 2SC5207A

Silicon NPN Triple Diffused Planar

## HITACHI

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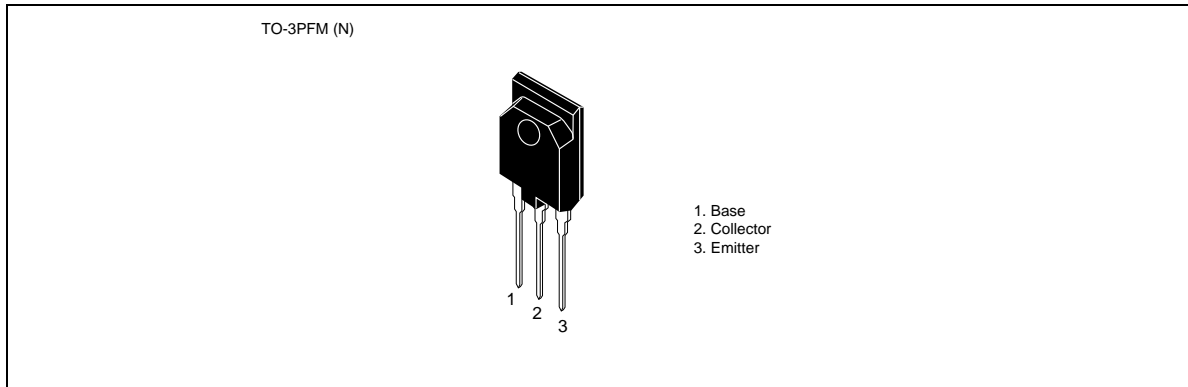
### Application

Character display horizontal deflection output

### Features

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

### Outline



## 2SC5207A

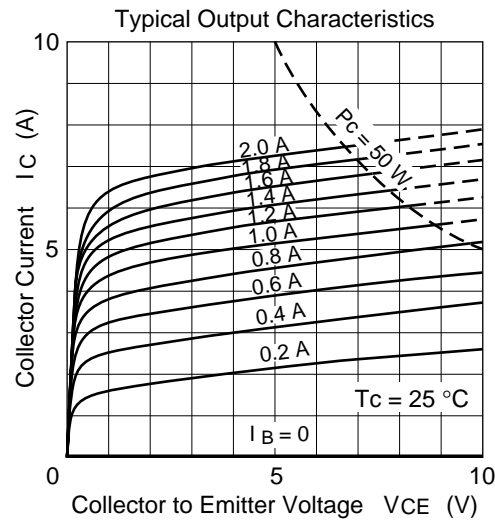
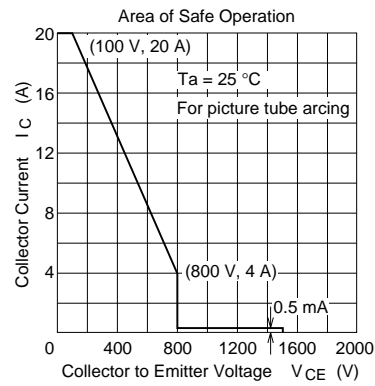
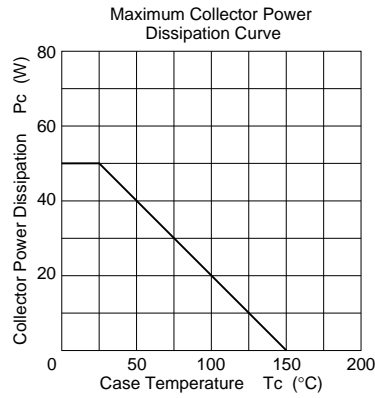
### Absolute Maximum Ratings (Ta = 25°C)

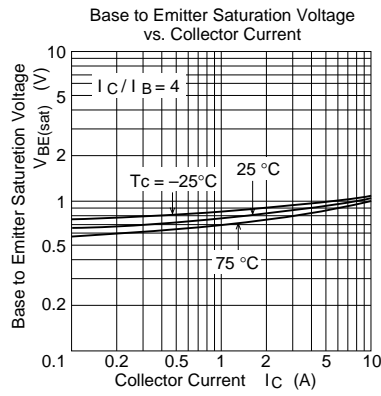
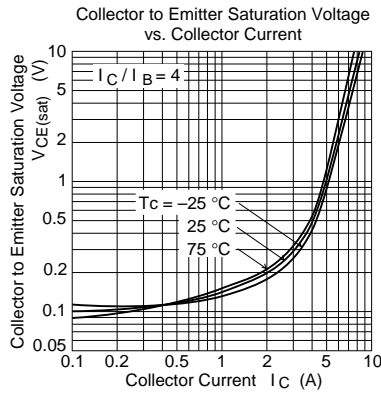
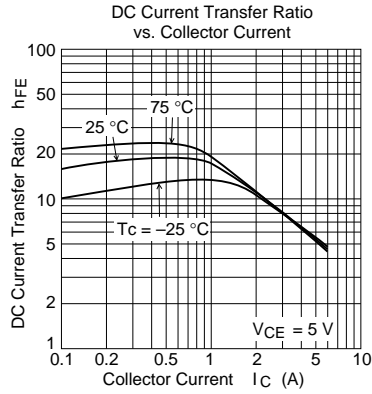
Item	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	1500	V
Collector to emitter voltage	$V_{CEO}$	800	V
Emitter to base voltage	$V_{EBO}$	6	V
Collector current	$I_C$	10	A
Collector surge current	$I_{C(surge)}$	20	A
Collector power dissipation	$P_C^{*1}$	50	W
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 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 conditions
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	800	—	—	V	$I_C = 10\text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	6	—	—	V	$I_E = 10\text{ mA}, I_C = 0$
Collector cutoff current	$I_{CES}$	—	—	500	$\mu\text{A}$	$V_{CE} = 1500\text{ V}, R_{BE} = 0$
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	$V_{CE(sat)}$	—	—	5	V	$I_C = 6\text{ A}, I_B = 1.6\text{ A}$
Base to emitter saturation voltage	$V_{BE(sat)}$	—	—	1.5	V	$I_C = 6\text{ A}, I_B = 1.6\text{ A}$
Fall time	$t_f$	—	0.2	0.4	$\mu\text{sec}$	$I_{CP} = 6\text{ A}, I_{B1} = 1.5\text{ A},$ $f_H = 31.5\text{ kHz}$







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# HITACHI

**Hitachi, Ltd.**  
Semiconductor & IC Div.  
Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100, Japan  
Tel: Tokyo (03) 3270-2111  
Fax: (03) 3270-5109

**For further information write to:**

Hitachi America, Ltd.  
Semiconductor & IC Div.  
2000 Sierra Point Parkway  
Brisbane, CA. 94005-1835  
U S A  
Tel: 415-589-8300  
Fax: 415-583-4207

Hitachi Europe GmbH  
Electronic Components Group  
Continental Europe  
Dornacher Straße 3  
D-85622 Feldkirchen  
München  
Tel: 089-9 91 80-0  
Fax: 089-9 29 30 00

Hitachi Europe Ltd.  
Electronic Components Div.  
Northern Europe Headquarters  
Whitebrook Park  
Lower Cookham Road  
Maidenhead  
Berkshire SL6 8YA  
United Kingdom  
Tel: 0628-585000  
Fax: 0628-778322

Hitachi Asia Pte. Ltd.  
16 Collyer Quay #20-00  
Hitachi Tower  
Singapore 0104  
Tel: 535-2100  
Fax: 535-1533

Hitachi Asia (Hong Kong) Ltd.  
Unit 706, North Tower,  
World Finance Centre,  
Harbour City, Canton Road  
Tsim Sha Tsui, Kowloon  
Hong Kong  
Tel: 27359218  
Fax: 27306071