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# 2SC5252

Silicon NPN Triple Diffused Planar

# HITACHI

ADE-208-391A (Z)  
2nd. Edition

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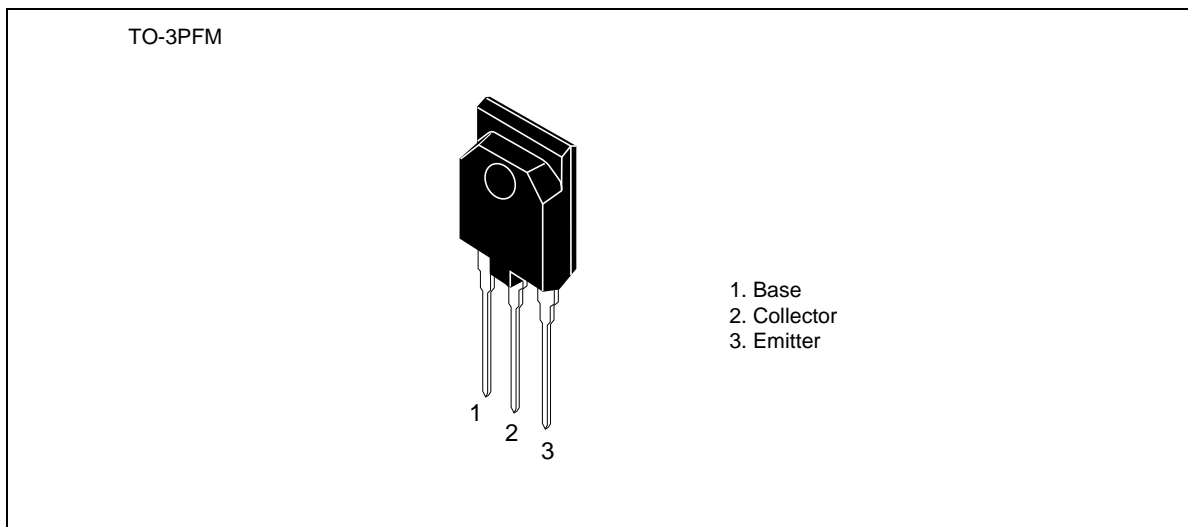
## Application

Character display horizontal deflection output

## Features

- High breakdown voltage  
 $V_{CBO} = 1500 \text{ V}$
- High speed switching  
 $t_r \leq 0.15 \text{ } \mu\text{sec (typ.)}$
- Isolated package  
TO-3P•FM

## Outline



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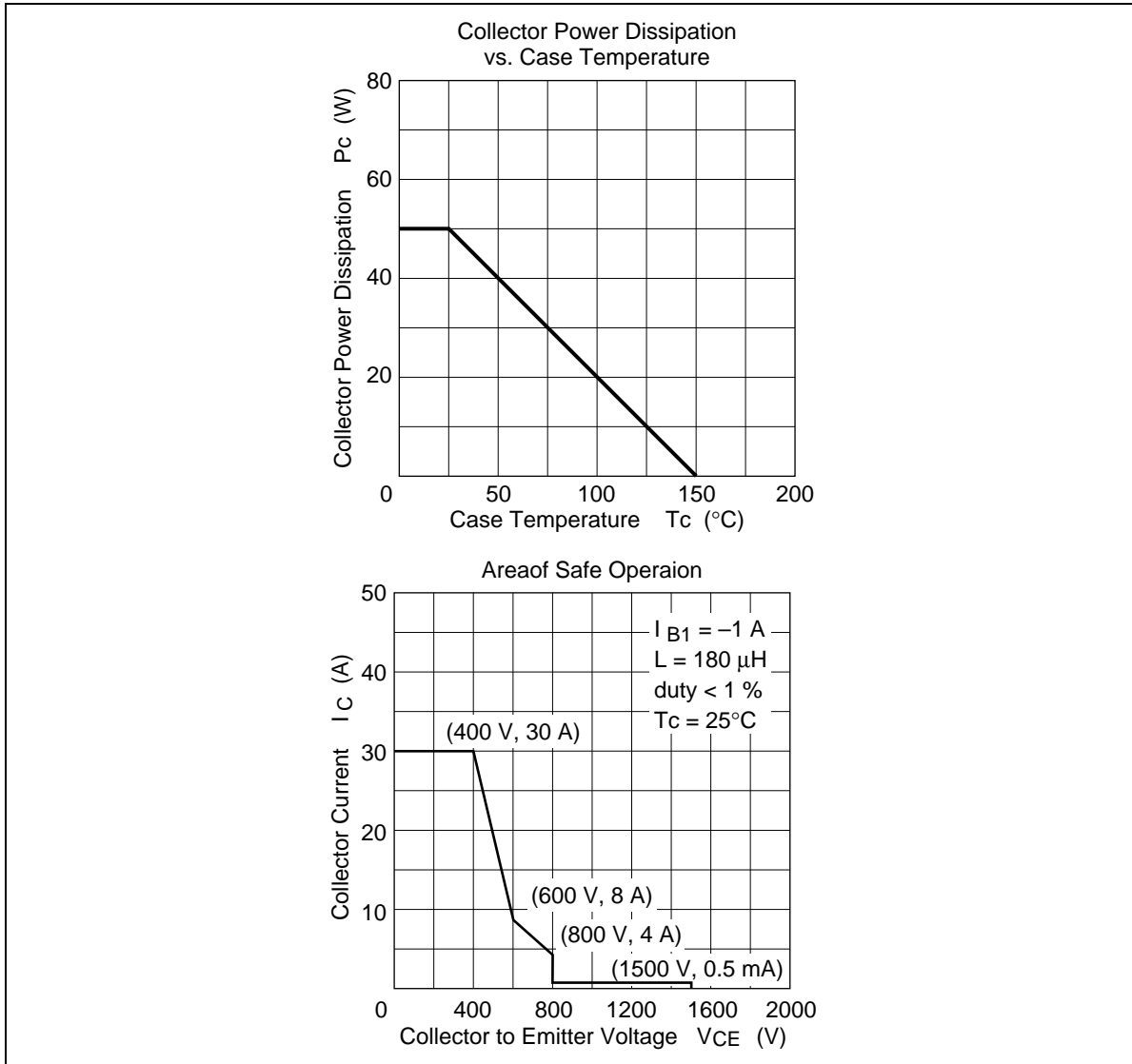
### Absolute Maximum Ratings (Ta = 25°C)

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	$I_C$	15	A
Collector peak current	$I_{C(peak)}$	30	A
Collector power dissipation	$P_C^{*1}$	50	W
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

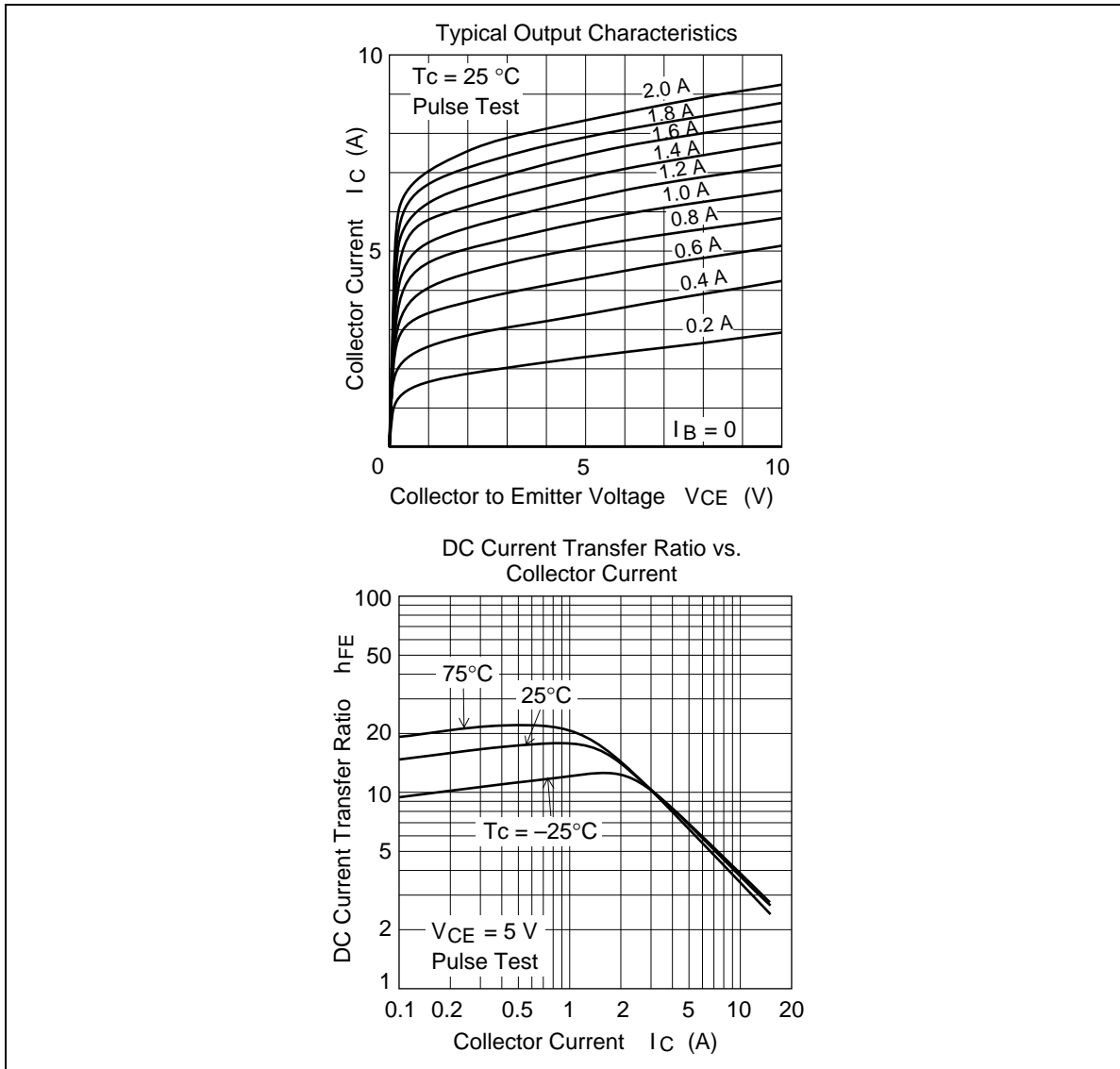
Note: 1.  $T_C = 25^\circ\text{C}$

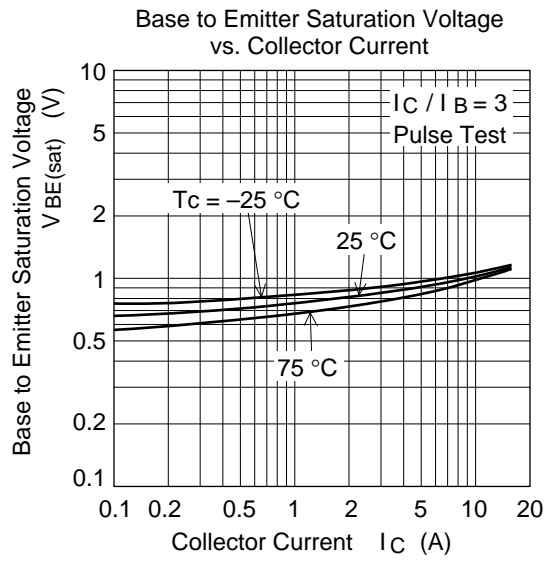
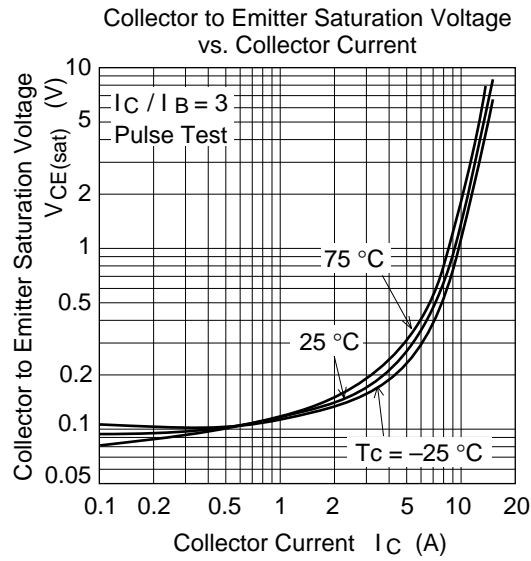
### Electrical Characteristics (Ta = 25°C)

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	—	35		$V_{CE} = 5\text{ V}$ , $I_C = 1\text{ A}$
DC current transfer ratio	$h_{FE2}$	3	—	6		$V_{CE} = 5\text{ V}$ , $I_C = 8\text{ A}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	5	V	$I_C = 10\text{ A}$ , $I_B = 3\text{ A}$
Base to emitter saturation voltage	$V_{BE(sat)}$	—	—	1.5	V	$I_C = 10\text{ A}$ , $I_B = 3\text{ A}$
Fall time	$t_f$	—	0.15	0.3	$\mu\text{sec}$	$I_{CP} = 7\text{ A}$ , $I_{B1} = 2\text{ A}$ , $f_H = 31.5\text{ kHz}$

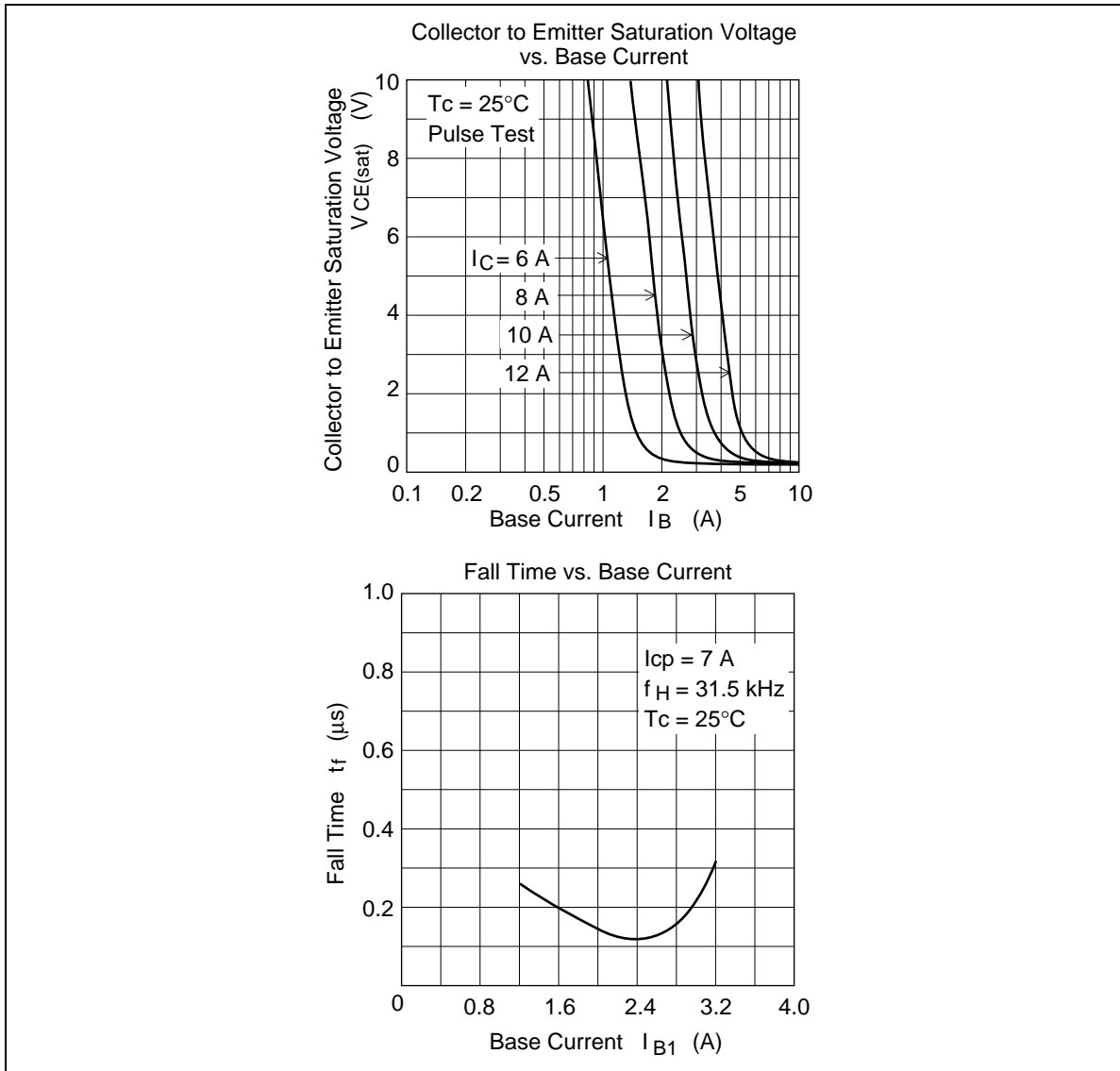


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# HITACHI

## 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  
Domacher 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