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# 2SC5252

Silicon NPN Triple Diffused Planar

# HITACHI

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

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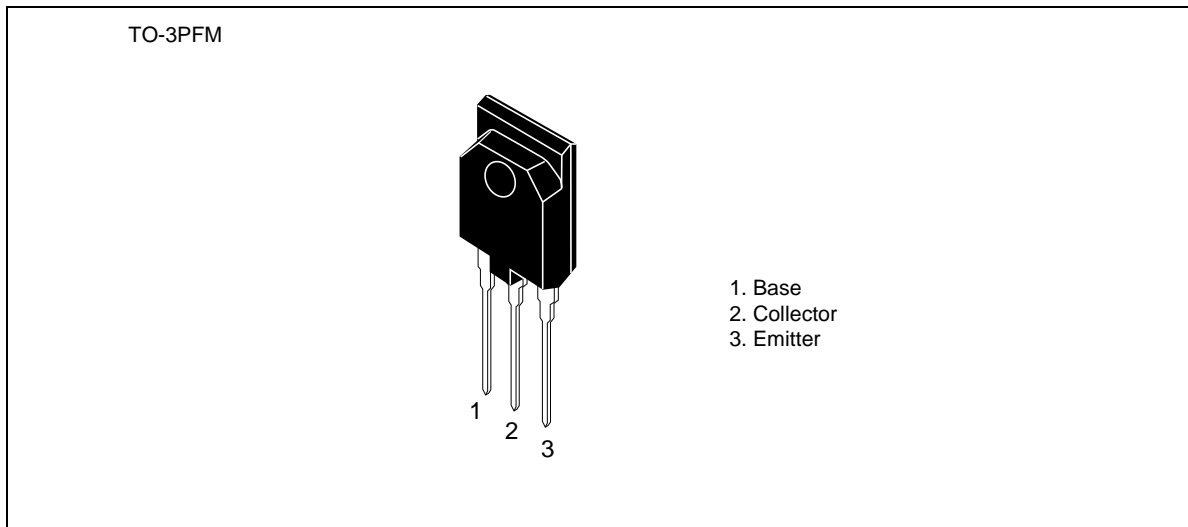
## Application

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



## 2SC5252

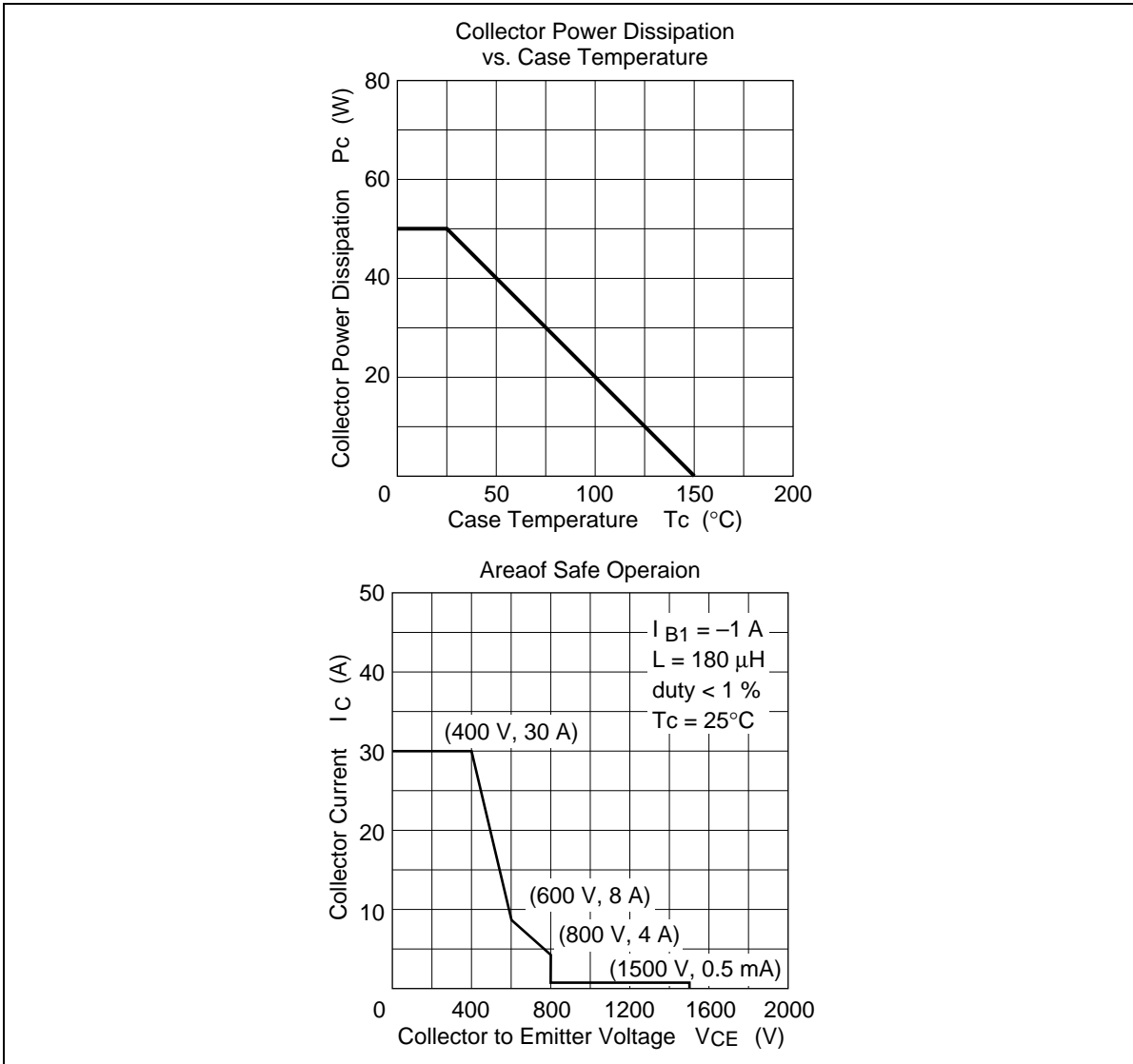
### Absolute Maximum Ratings (Ta = 25°C)

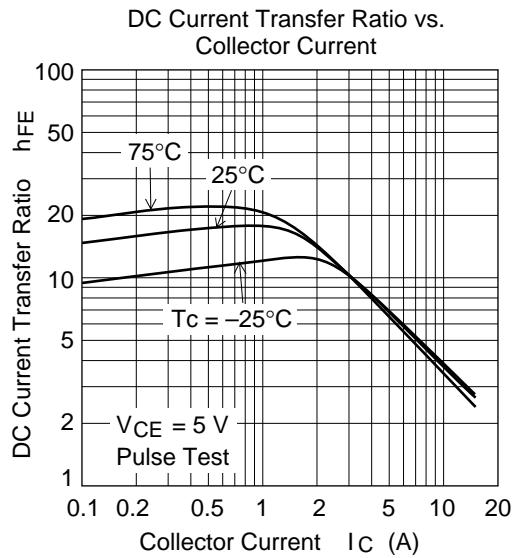
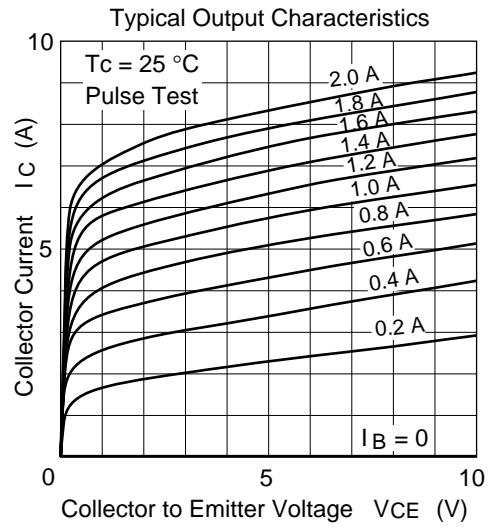
Item	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	1500	V
Collector to emitter voltage	$V_{CEO}$	800	V
Emitter to base voltage	$V_{EBO}$	6	V
Collector current	$I_C$	15	A
Collector peak current	$I_{C(peak)}$	30	A
Collector power dissipation	$P_C^{*1}$	50	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

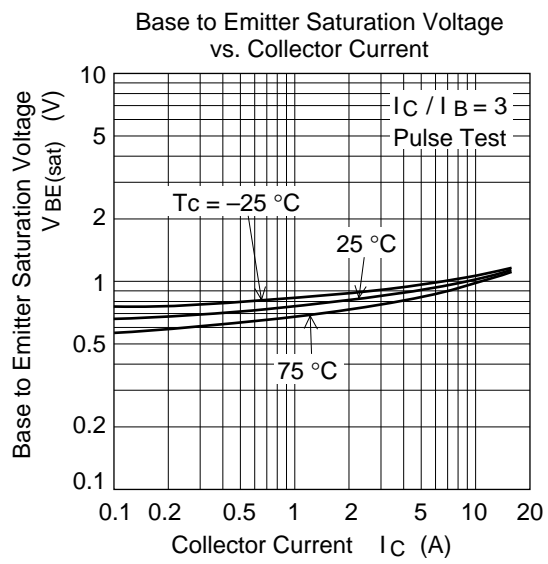
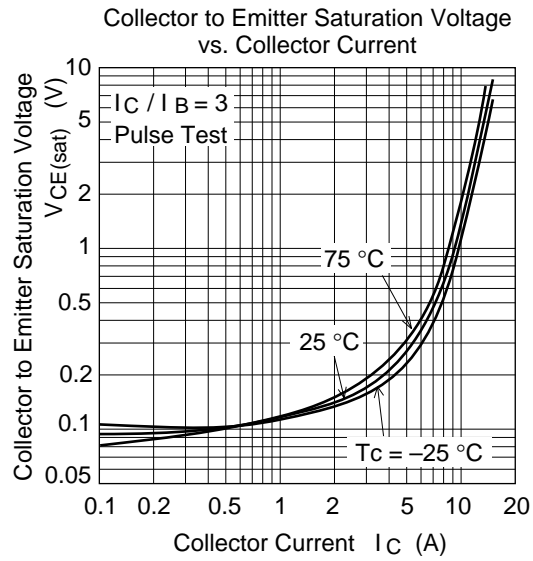
Note: 1.  $T_C = 25^\circ\text{C}$

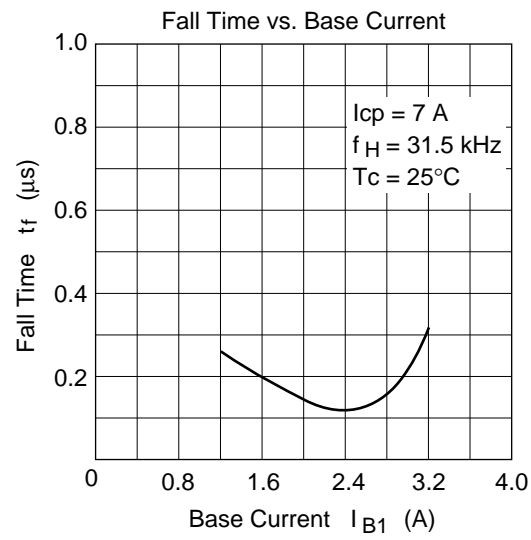
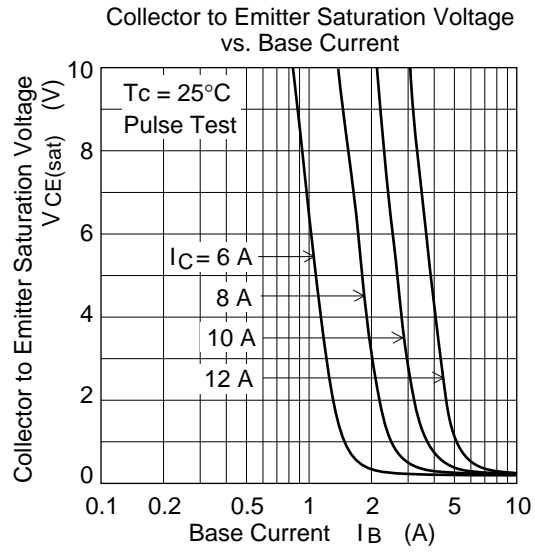
### Electrical Characteristics (Ta = 25°C)

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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