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# 2SC5470

Silicon NPN Triple Diffused  
Character Display Horizontal Deflection Output

# HITACHI

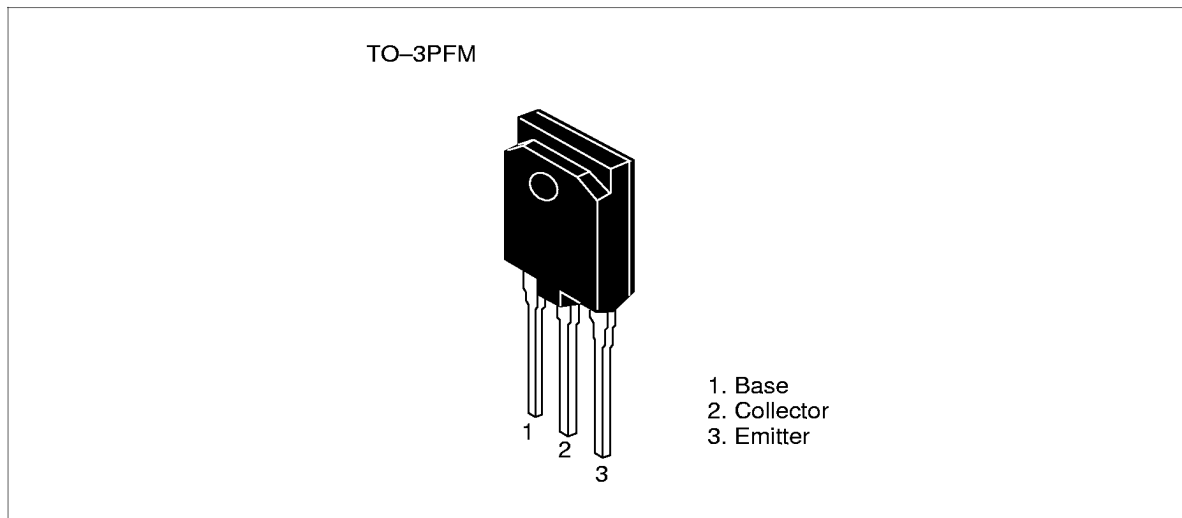
ADE-208-672 (Z)  
1st. Edition  
Oct. 1, 1998

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## Features

- High breakdown voltage  
 $V_{CBO} = 1500 \text{ V}$
- High speed switching  
 $t_f = 0.15 \mu\text{sec}(\text{typ.})$  at  $f_H = 64\text{kHz}$

## Outline



## 2SC5470

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

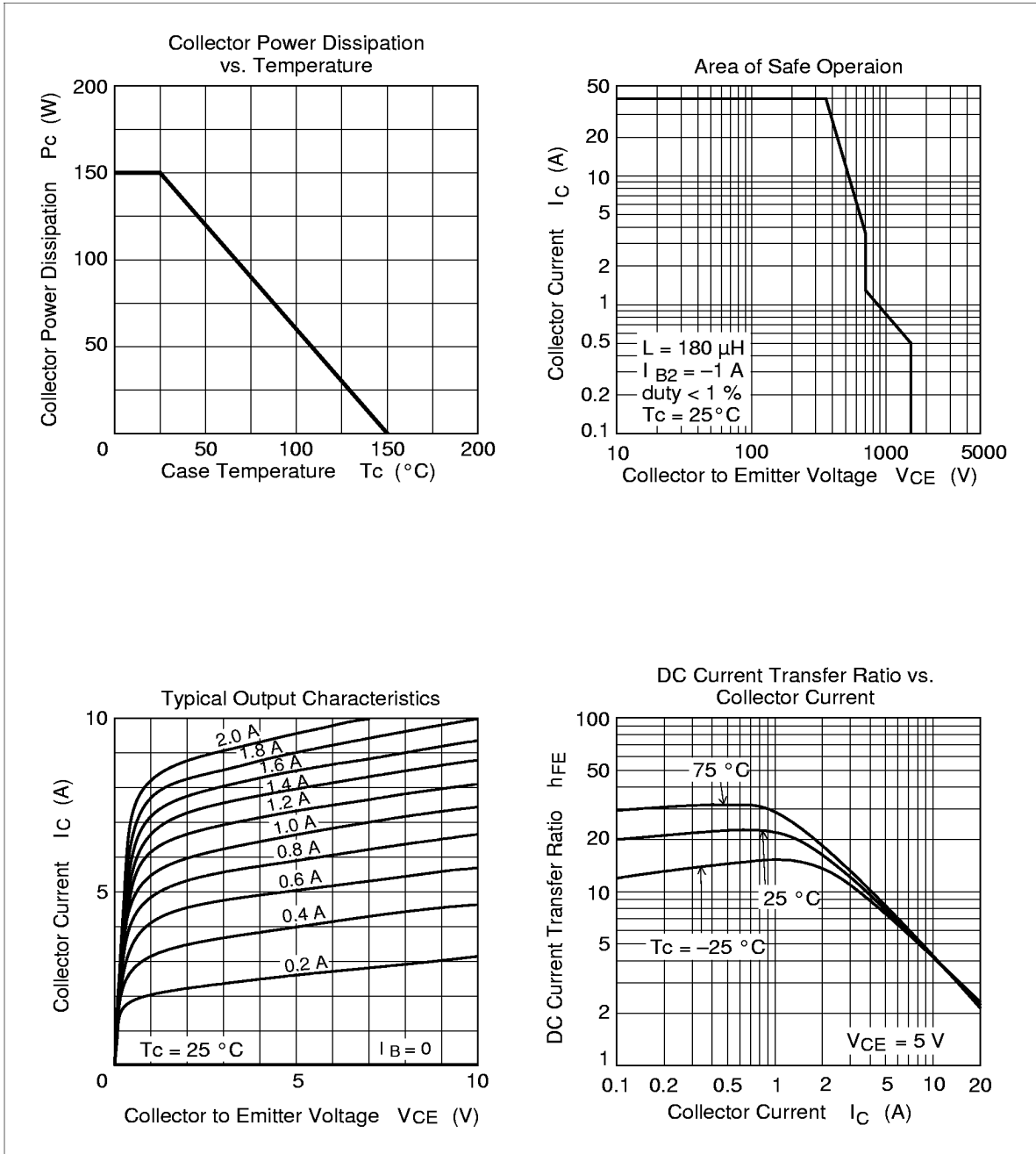
Item	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	1500	V
Collector to emitter voltage	$V_{CEO}$	700	V
Emitter to base voltage	$V_{EBO}$	6	V
Collector current	$I_C$	20	A
Collector peak current	$i_{c(peak)}$	40	A
Collector power dissipation	$P_C$ <sup>Note1</sup>	150	W
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

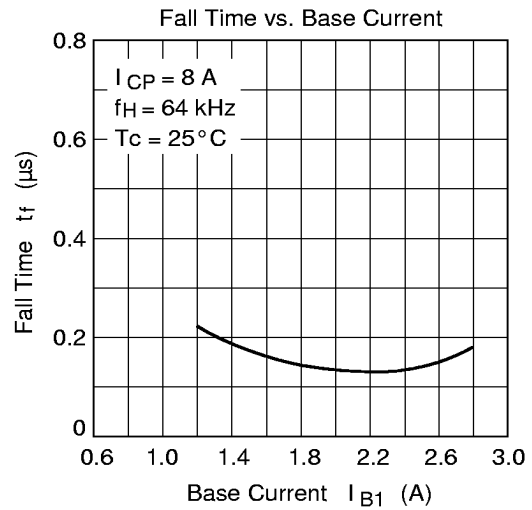
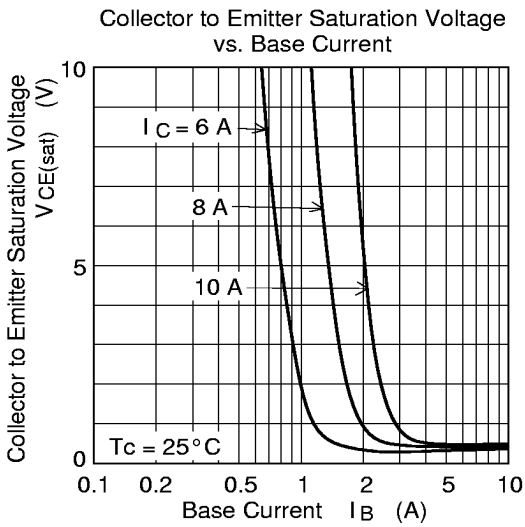
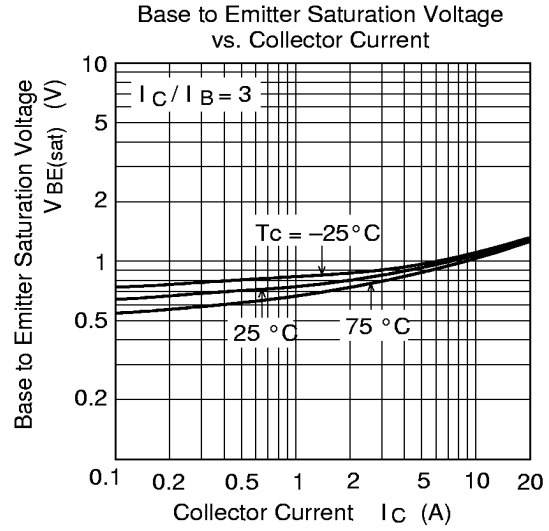
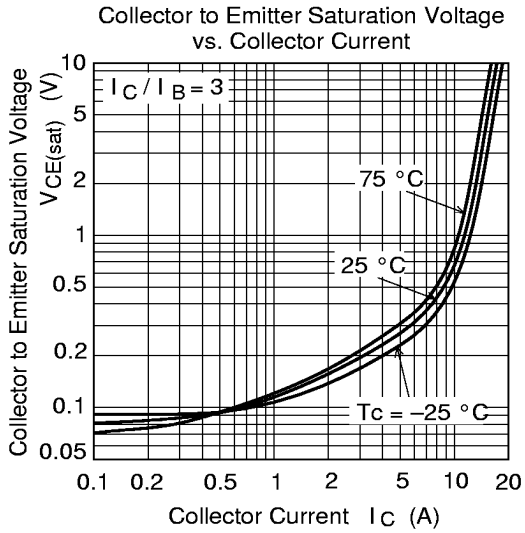
Note: 1. Value at  $T_c = 25^\circ\text{C}$

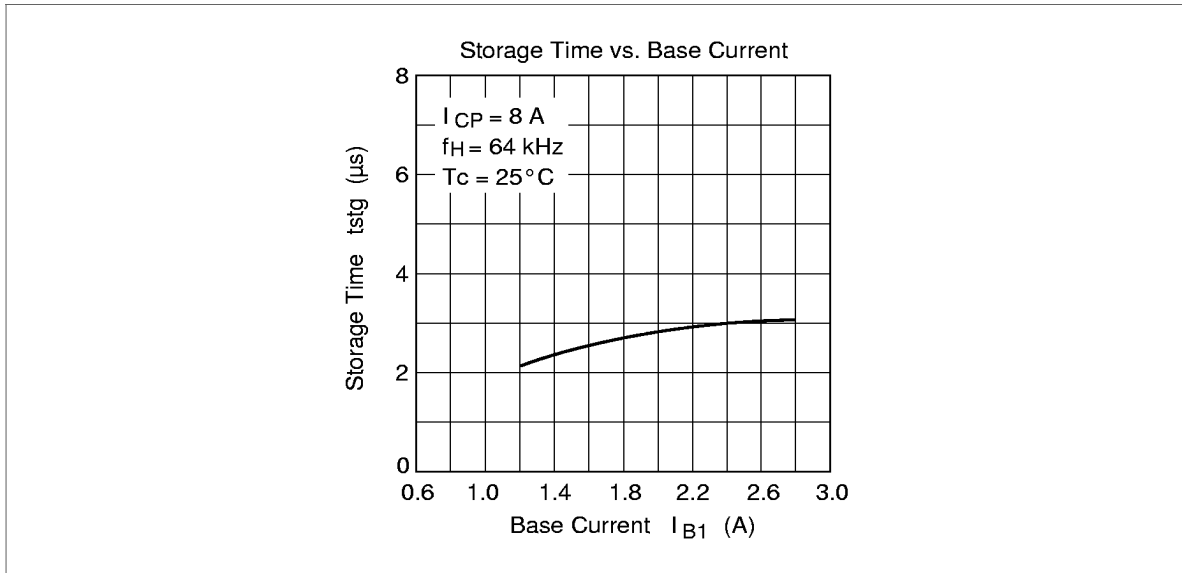
### Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	700	—	—	V	$I_C = 10\text{mA}$ , $R_{BE} = \bullet$
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	$h_{FE1}$	10	—	40		$V_{CE} = 5\text{V}$ , $I_C = 1\text{A}$
DC current transfer ratio	$h_{FE2}$	3.5	—	6.5		$V_{CE} = 5\text{V}$ , $I_C = 10\text{A}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	5	V	$I_C = 12\text{A}$ , $I_B = 4\text{A}$
Base to emitter saturation voltage	$V_{BE(sat)}$	—	—	1.5	V	$I_C = 12\text{A}$ , $I_B = 4\text{A}$
Fall time	$t_f$	—	0.2	0.4	$\mu\text{s}$	$I_{CP} = 8\text{A}$ , $I_{B1} = 3\text{A}$ $f_H = 31.5\text{kHz}$
Fall time	$t_f$	—	0.15	—	$\mu\text{s}$	$I_{CP} = 8\text{A}$ , $I_{B1} = 2\text{A}$ $f_H = 64\text{kHz}$

Main Characteristics







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## Package Dimensions (Unit: mm)

