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# 2SC5449

Silicon NPN Triple Diffused  
Character Display Horizontal Deflection Output

# HITACHI

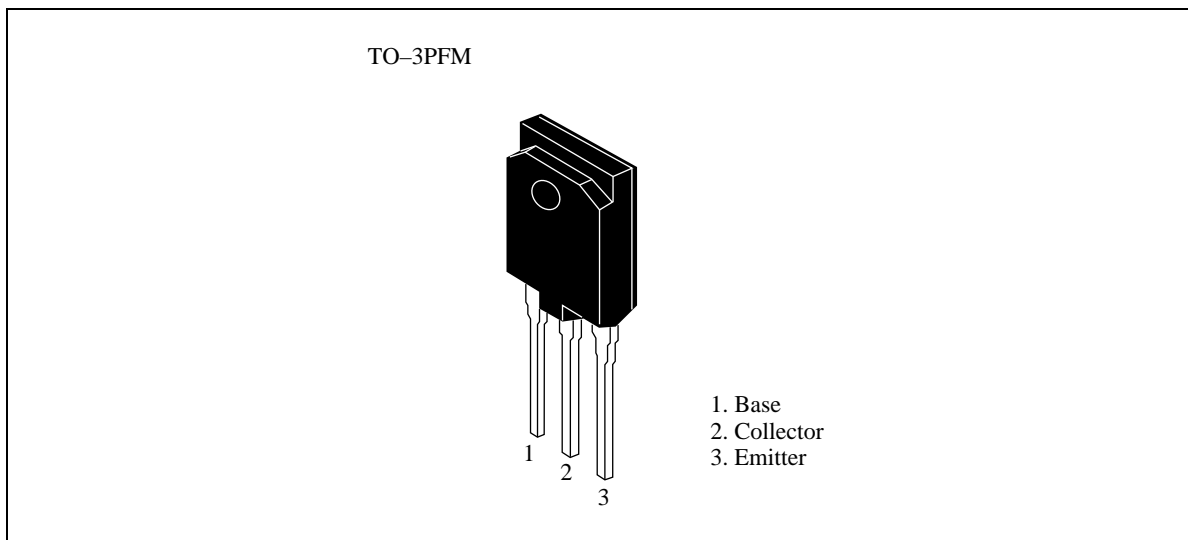
ADE-208-578 B (Z)  
3rd. Edition  
September 1997

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## Features

- High breakdown voltage  
 $V_{CBO} = 1500 \text{ V}$
- High speed switching  
 $t_r = 0.15 \mu\text{sec (typ.)}$  at  $f_H = 64 \text{ kHz}$
- Isolated package  
TO-3PFM

## Outline



## 2SC5449

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

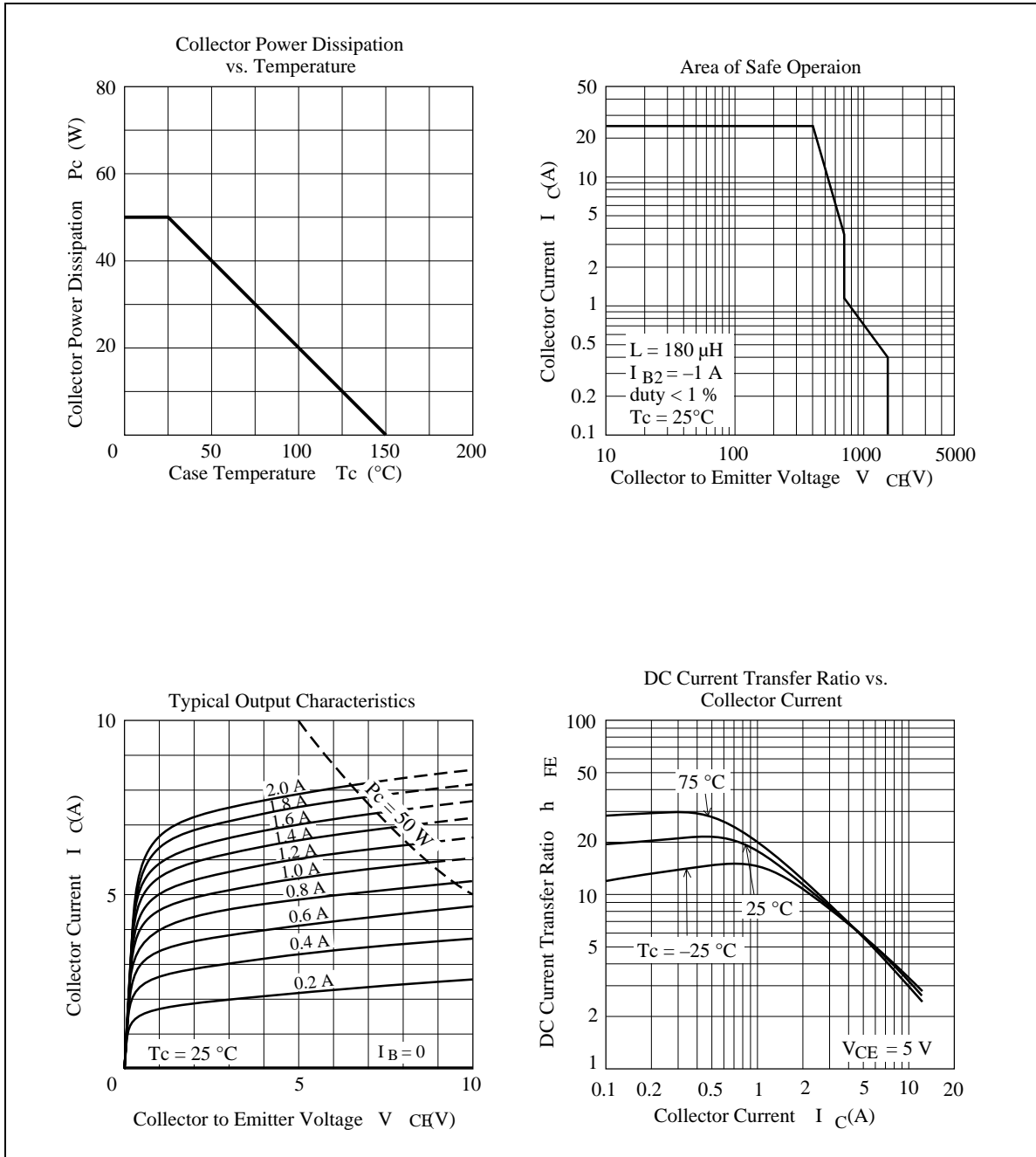
Item	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	1500	V
Collector to emitter voltage	$V_{CEO}$	700	V
Emitter to base voltage	$V_{EBO}$	6	V
Collector current	$I_C$	12	A
Collector peak current	$i_{c(peak)}$	24	A
Collector power dissipation	$P_C$ <sup>Note1</sup>	50	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

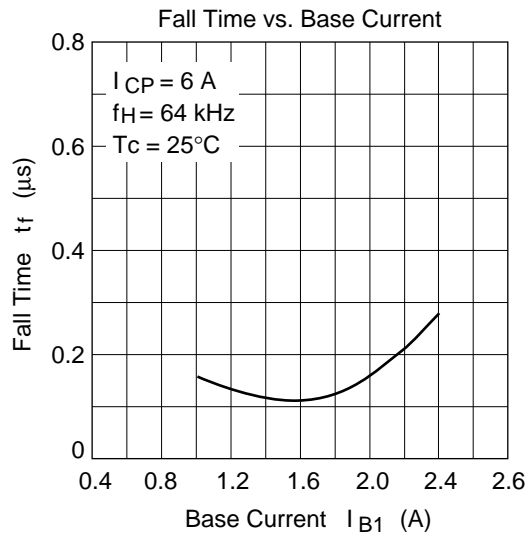
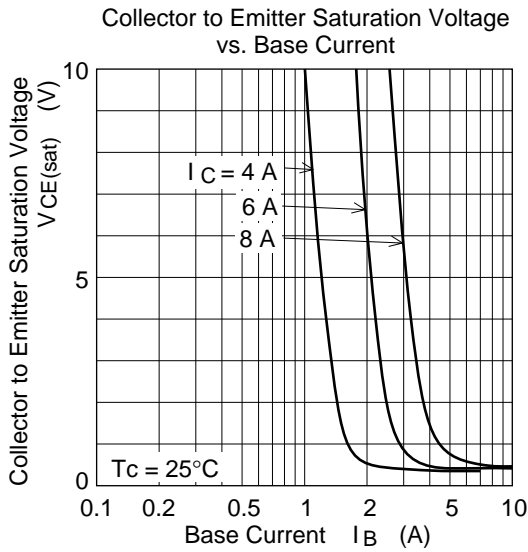
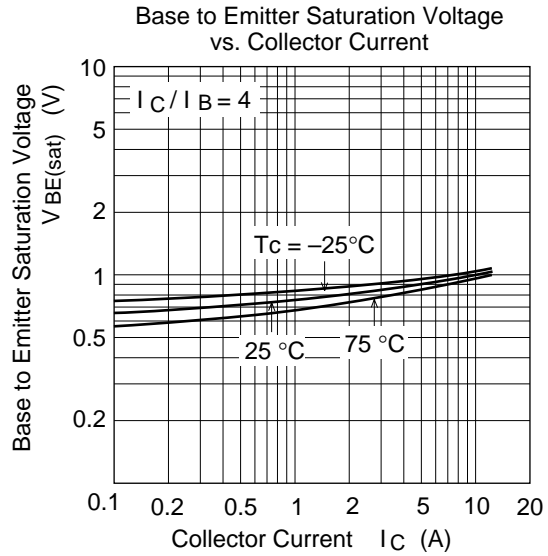
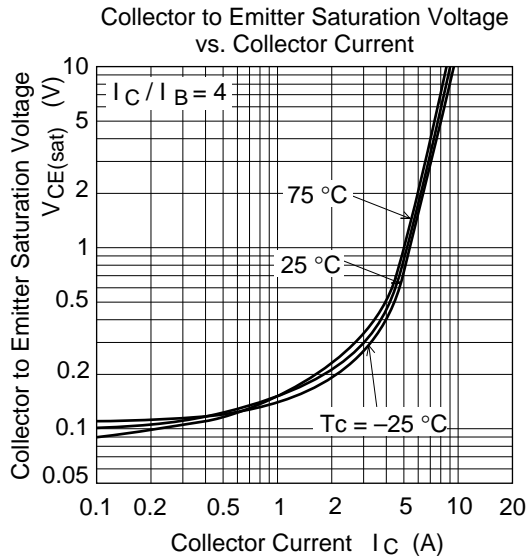
Note: 1. Value at Tc = 25°C

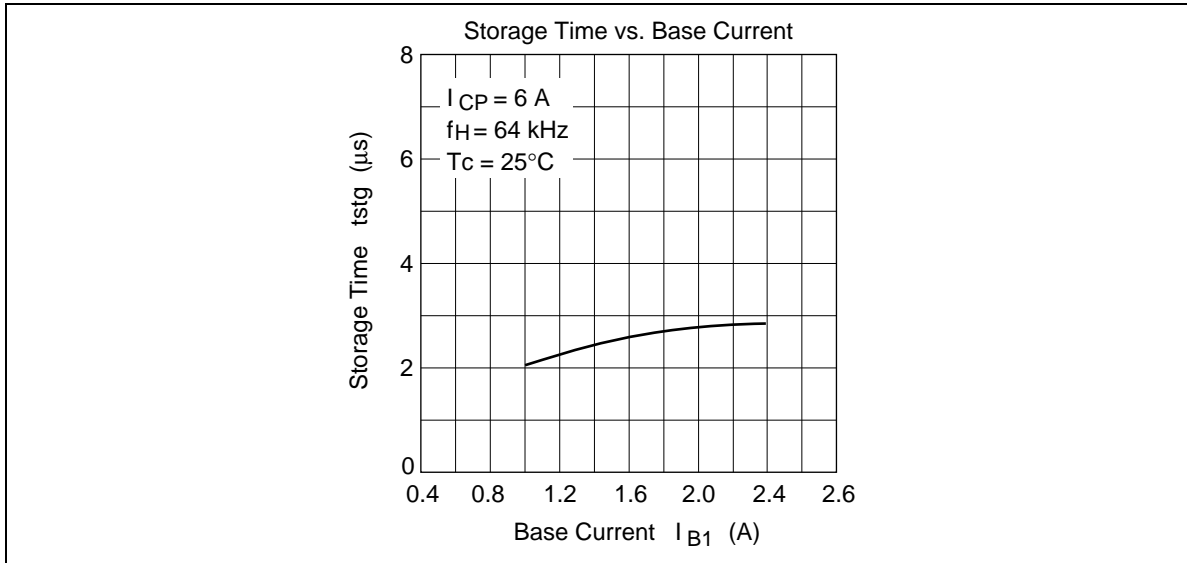
### Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	700	—	—	V	$I_C = 10\text{mA}$ , $R_{BE} = \infty$
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	$h_{FE1}$	10	—	30		$V_{CE} = 5\text{V}$ , $I_C = 1\text{A}$
DC current transfer ratio	$h_{FE2}$	3.5	—	6.5		$V_{CE} = 5\text{V}$ , $I_C = 7\text{A}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	5	V	$I_C = 7\text{A}$ , $I_B = 1.8\text{A}$
Base to emitter saturation voltage	$V_{BE(sat)}$	—	—	1.5	V	$I_C = 7\text{A}$ , $I_B = 1.8\text{A}$
Fall time	$t_f$	—	0.2	0.4	$\mu\text{s}$	$I_{CP} = 6\text{A}$ , $I_{B1} = 2\text{A}$ $f_H = 31.5\text{kHz}$
Fall time	$t_f$	—	0.15	—	$\mu\text{s}$	$I_{CP} = 6\text{A}$ , $I_{B1} = 1.5\text{A}$ $f_H = 64\text{kHz}$

Main Characteristics



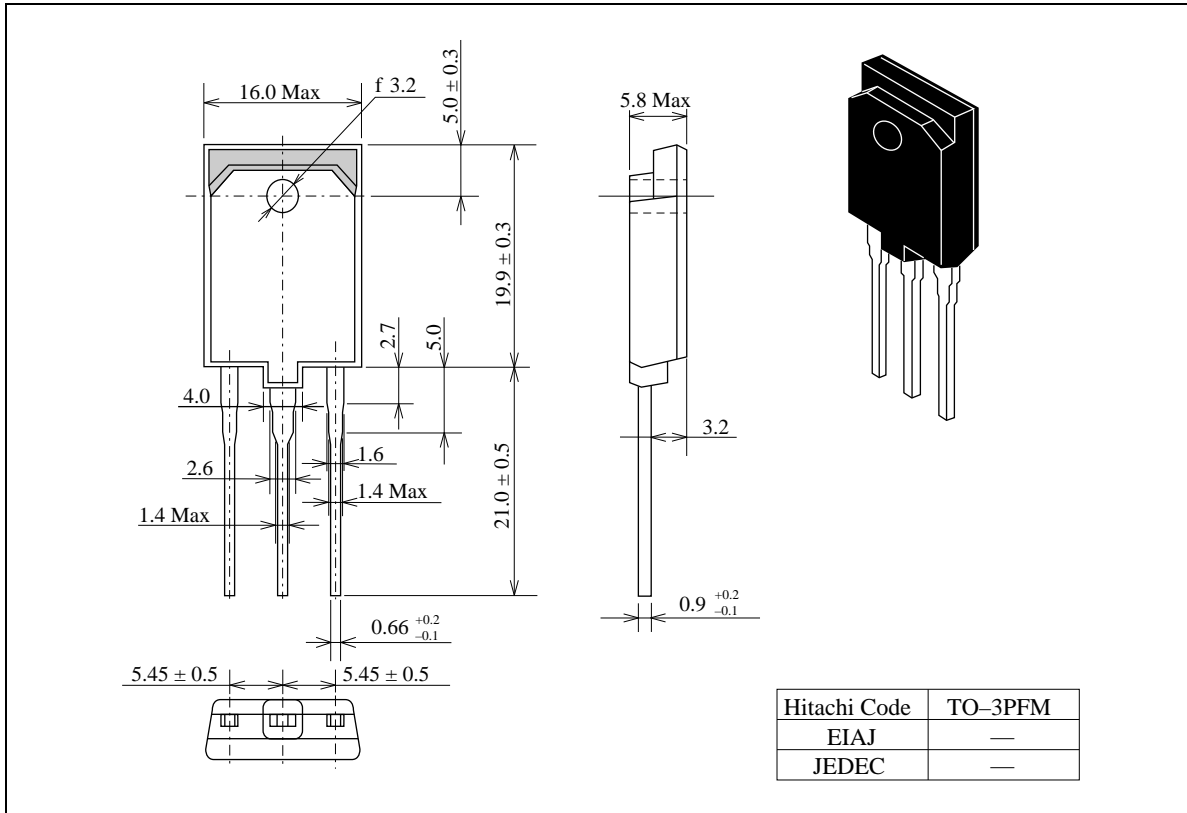




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## Package Dimensions

Unit: mm



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