
2SC5449

Silicon NPN Triple Diffused
Character Display Horizontal Deflection Output

HITACHI

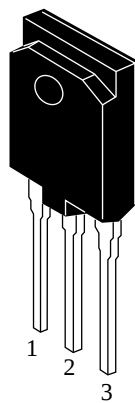
ADE-208-578 B (Z)
3rd. Edition
September 1997

Features

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

Outline

TO-3PFM



1. Base
2. Collector
3. Emitter

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Absolute Maximum Ratings (Ta = 25°C)

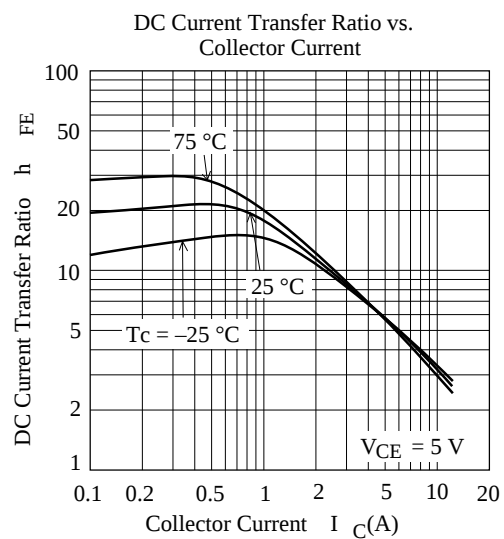
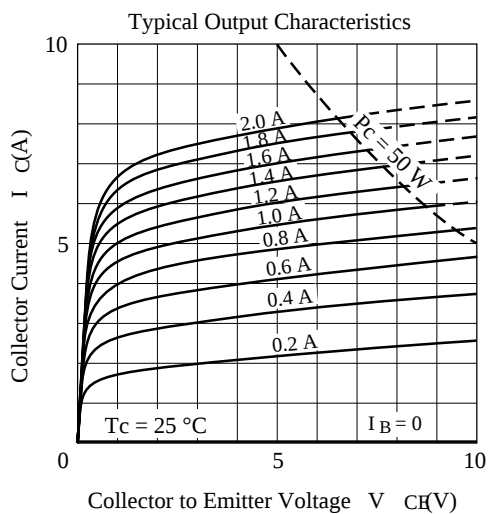
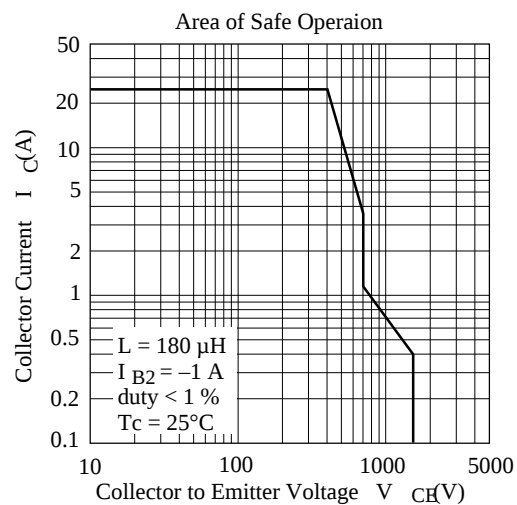
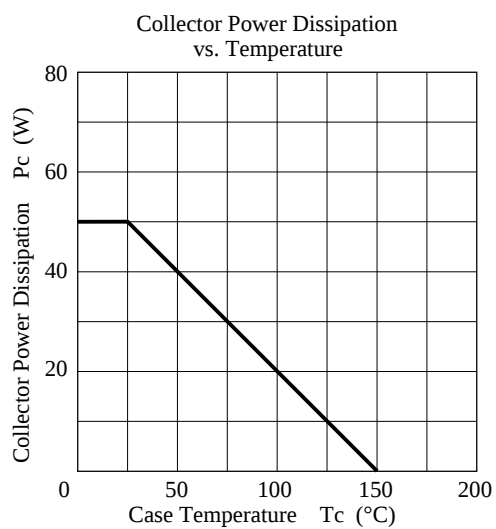
Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	1500	V
Collector to emitter voltage	V_{CEO}	700	V
Emitter to base voltage	V_{EBO}	6	V
Collector current	I_C	12	A
Collector peak current	$i_{c(peak)}$	24	A
Collector power dissipation	P_C ^{Note1}	50	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	–55 to +150	°C

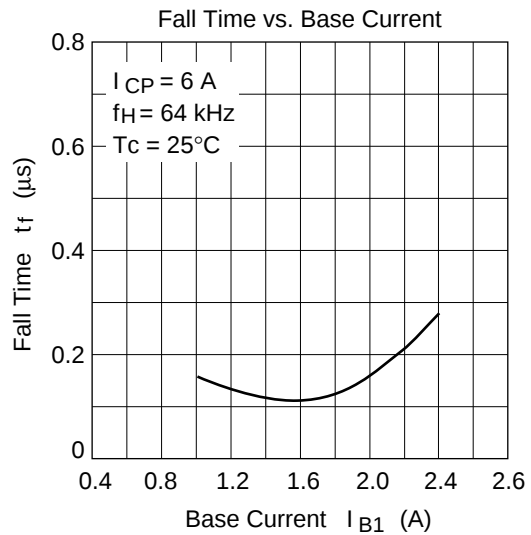
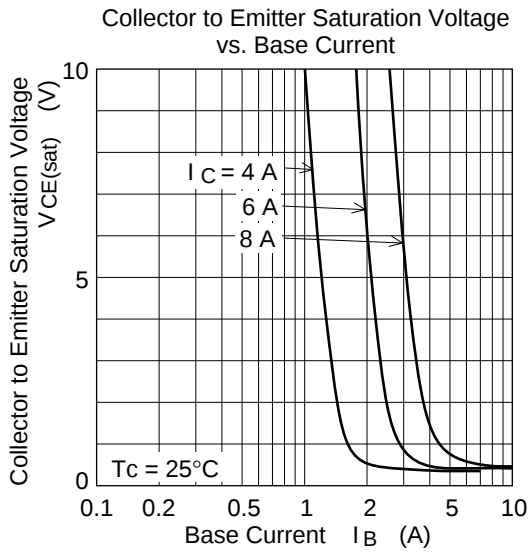
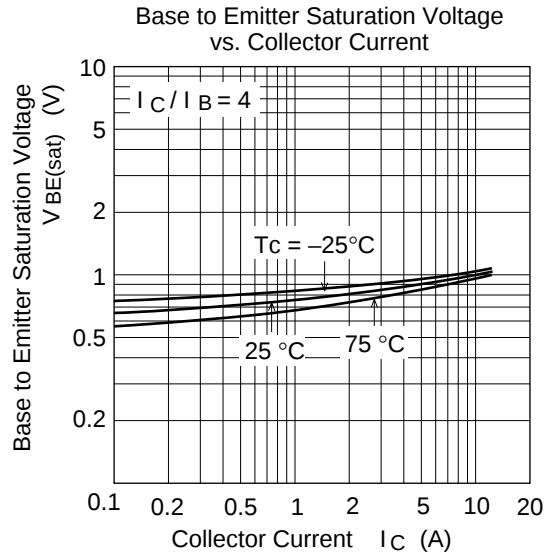
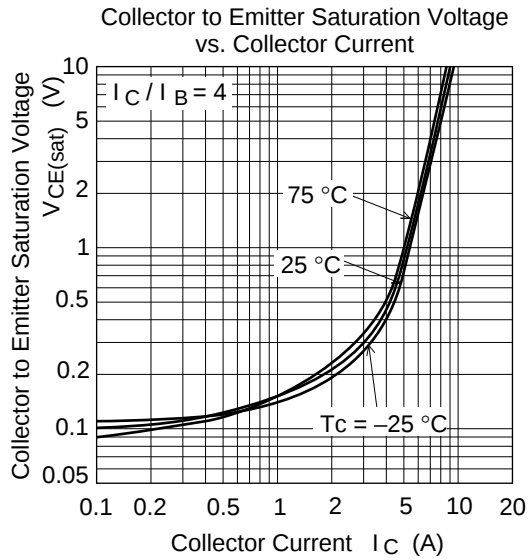
Note: 1. Value at $T_c = 25^\circ\text{C}$

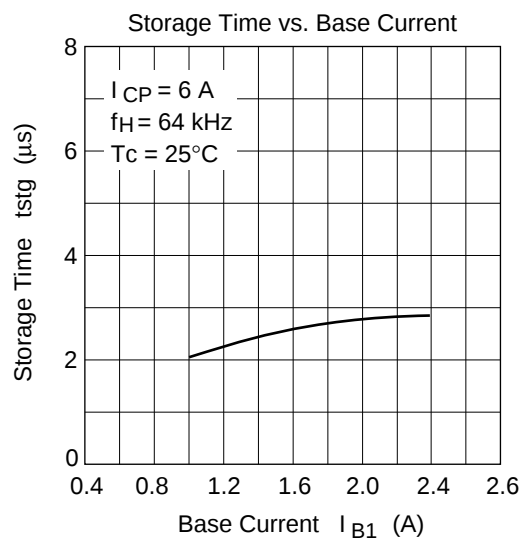
Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	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	μA	$V_{CE} = 1500\text{V}$, $R_{BE} = 0$
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	μs	$I_{CP} = 6\text{A}$, $I_{B1} = 2\text{A}$ $f_H = 31.5\text{kHz}$
Fall time	t_f	—	0.15	—	μs	$I_{CP} = 6\text{A}$, $I_{B1} = 1.5\text{A}$ $f_H = 64\text{kHz}$

Main Characteristics



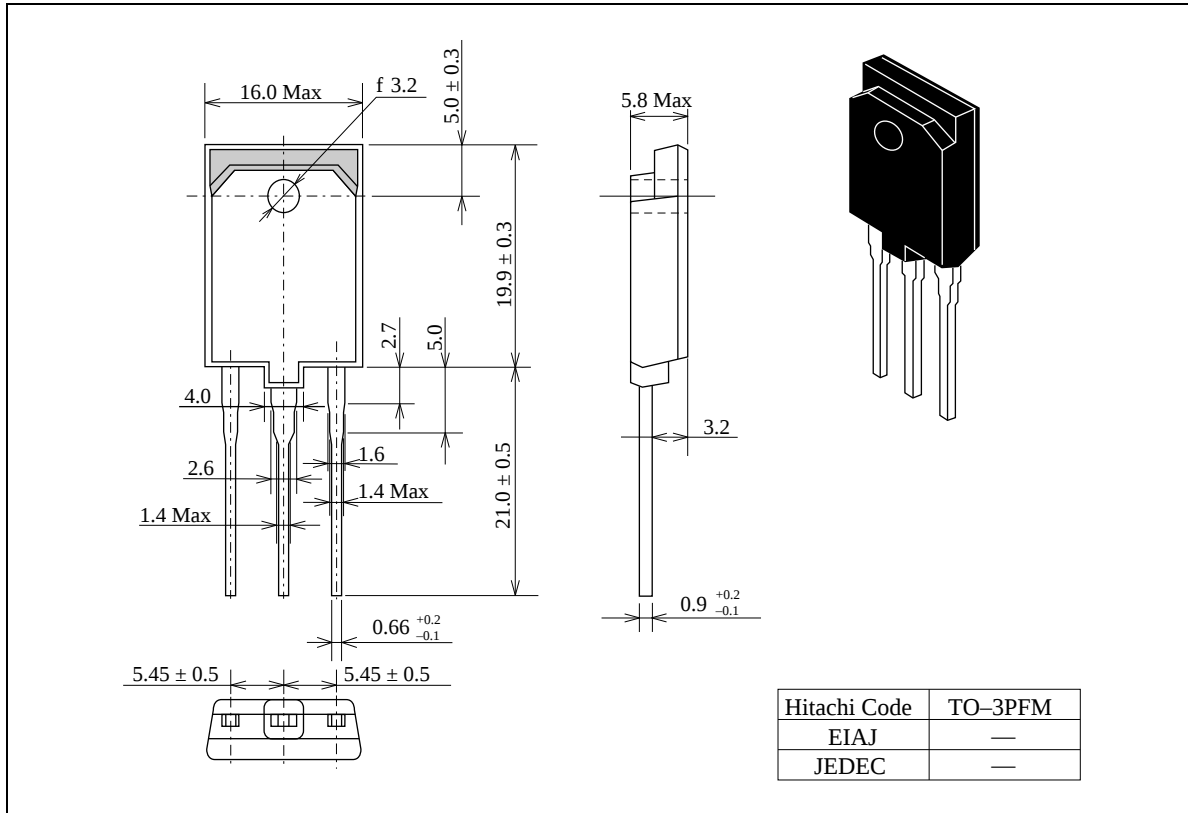




2SC5449

Package Dimensions

Unit: mm



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