Silicon NPN Triple Diffused Character Display Horizntal Deflection Output

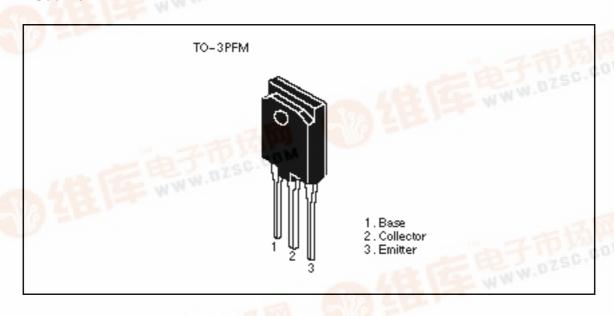
HITACHI

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

Features

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

Outline





Absolute Maximum Ratings ($Ta = 25^{\circ}C$)

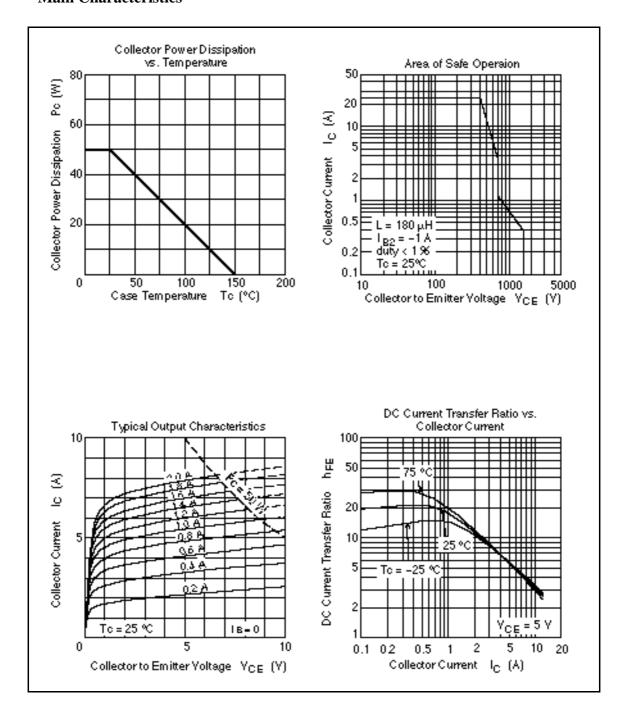
Item	Symbol	Ratings	Unit ∨	
Collector to base voltage	V _{CBO}	1500		
Collector to emitter voltage	V _{CEO}	700	V	
Emitter to base voltage	V_{EBO}	6	V	
Collector current	I _c	12	Α	
Collector peak current	i _{c(peak)}	24	Α	
Collector power dissipation	P _C ^{Note1}	50	W	
Junction temperature	Tj	150	°C	
Storage temperature	Tstg	-55 to +150	°C	

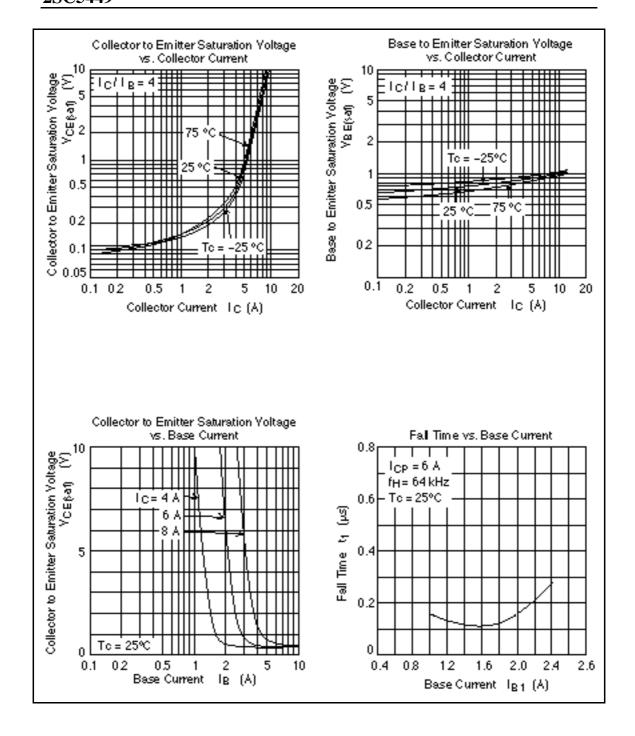
Note: 1. Value at Tc = 25°C

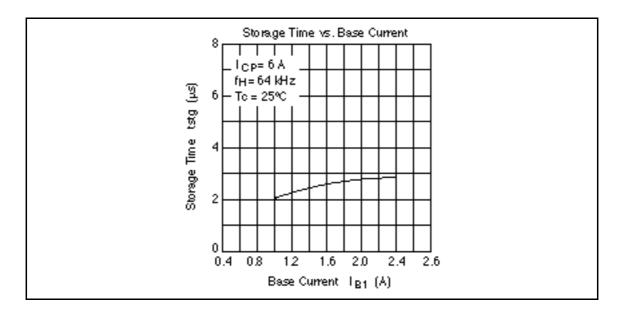
Electrical Characteristics ($Ta = 25^{\circ}C$)

Item	Symbol	Min	Тур	Max	Unit	Test Conditions
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	700	_	_	V	$I_{C} = 10$ mA, $R_{BE} =$
Emitter to base breakdownvoltage	$V_{(BR)EBO}$	6	_	_	V	$I_{E} = 10 \text{mA}, I_{C} = 0$
Collector cutoff current	I _{CES}	_	_	500	μΑ	$V_{CE} = 1500V, R_{BE} = 0$
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 saturationvoltage	$V_{CE(sat)}$	_	_	5	V	$I_{\rm C} = 7A, I_{\rm B} = 1.8A$
Base to emitter saturationvoltage	$V_{BE(sat)}$	_	_	1.5	V	$I_{\rm C} = 7A, I_{\rm B} = 1.8A$
Fall time	t _f	_	0.2	0.4	μs	$I_{CP} = 6A, I_{B1} = 2A$ $f_{H} = 31.5kHz$
Fall time	t _f		0.15	_	μs	$I_{CP} = 6A, I_{B1} = 1.5A$ $f_{H} = 64kHz$

Main Characteristics

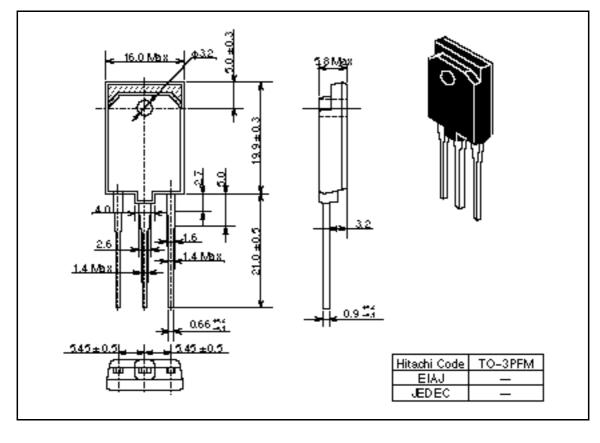






Package Dimensions

Unit: mm



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