

Silicon NPN Triple Diffused Horizntal Deflection Output

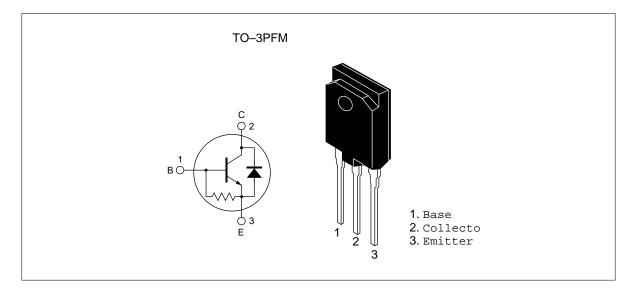
# HITACHI

ADE-208-632 (Z) 1st. Edition Oct. 1, 1998

#### Features

- High breakdown voltage  $V_{CES} = 1500 \text{ V}$
- Isolated package TO–3PFM
- Built-in damper diode

#### Outline



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

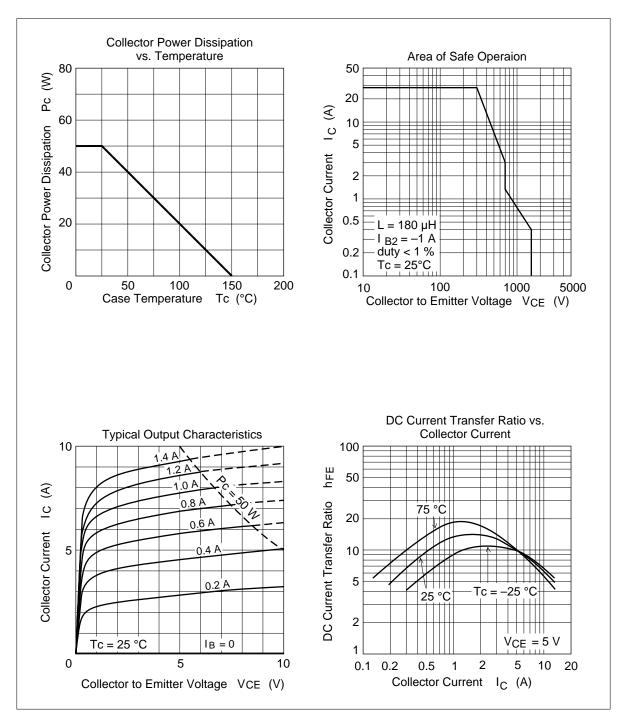
Item	Symbol	Ratings	Unit	
Collector to emitter voltage	V <sub>CES</sub>	1500	V	
Emitter to base voltage	V <sub>EBO</sub>	5	V	
Collector current	I <sub>c</sub>	14	A	
Collector peak current	İ <sub>c(peak)</sub>	28	А	
Collector power dissipation	P <sub>C</sub> <sup>Note1</sup>	50	W	
Junction temperature	Tj	150	°C	
Storage temperature	Tstg	-55 to +150	°C	
Collector to emitter diode forward current	I <sub>D</sub>	14	А	

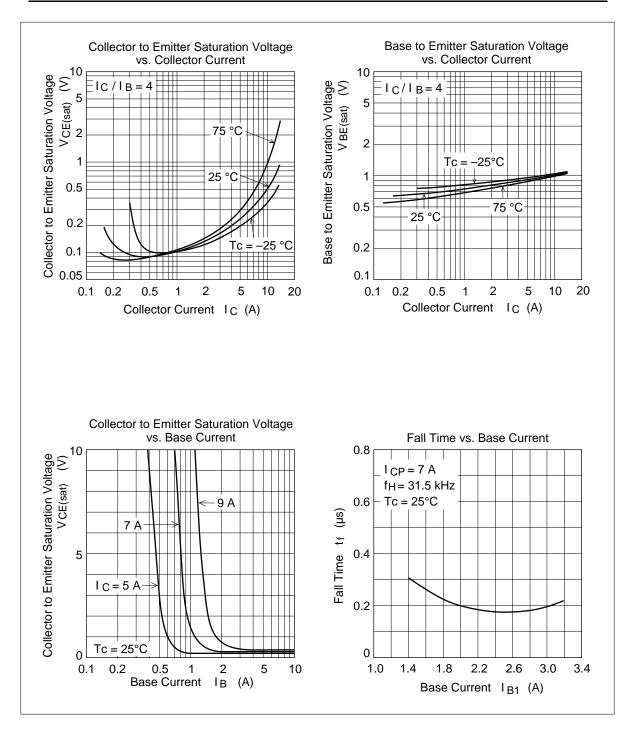
Note: 1. Value at  $Tc = 25^{\circ}C$ 

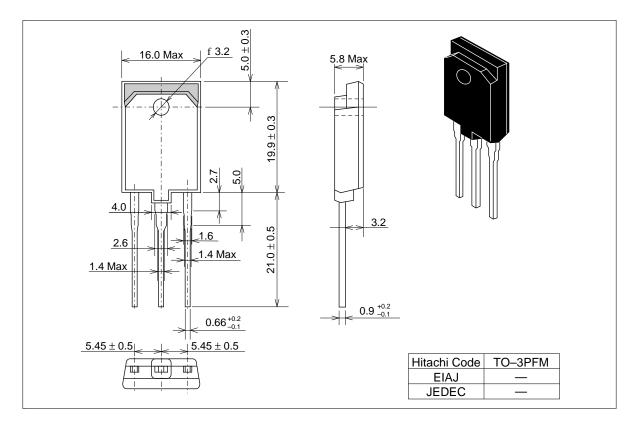
#### **Electrical Characteristics** (Ta = 25°C)

Item	Symbol	Min	Тур	Мах	Unit	Test Conditions
Emitter to base breakdown voltage	V <sub>(BR)EBO</sub>	5			V	$I_{\rm E} = 500 {\rm mA}, \ I_{\rm C} = 0$
Collector cutoff current	I <sub>CES</sub>			500	μA	$V_{CE} = 1500V, R_{BE} = 0$
DC current transfer ratio	$h_{\text{FE1}}$	5		25		$V_{CE} = 5 \text{ V}, \text{ I}_{C} = 1 \text{ A}$
DC current transfer ratio	h <sub>FE2</sub>	4		7		$V_{ce} = 5 \text{ V}, \text{ I}_{c} = 10 \text{ A}$
Collector to emitter saturation voltage	V <sub>CE(sat)</sub>	_	—	5	V	$I_{\rm c} = 10A, I_{\rm B} = 2.5A$
Base to emitter saturation voltage	V <sub>BE(sat)</sub>			1.5	V	$I_{\rm c} = 10A, I_{\rm B} = 2.5A$
Collector to emitter diode forward voltage	V <sub>ECF</sub>			2	V	I <sub>F</sub> = 14A
Fall time	t <sub>f</sub>	_	0.2	0.4	μs	I <sub>CP</sub> = 7A, I <sub>B1</sub> = 2.4A f <sub>H</sub> = 31.5kHz

#### **Main Characteristics**







#### Package Dimensions (Unit: mm)

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## HITACHI

#### Hitachi, Ltd.

Semiconductor & IC Div. Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan Tel: Tokyo (03) 3270-2111 Fax: (03) 3270-5109

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#### For further information write to: Hitachi Semiconductor Hitachi Europe GmbH

Hitachi Semiconductor (America) Inc. 2000 Sierra Point Parkway Brisbane, CA 94005-1897 Tel: <1> (800) 285-1601 Fax: <1> (303) 297-0447

Electronic components Group Domacher Straße 3 D-85622 Feldkirchen, Munich Germany Tel: <49> (89) 9 9180-0 Fax: <49> (89) 9 29 30 00 Hitachi Europe Ltd. Electronic Components Group. Whitebrook Park Lower Cookham Road Maidenhead Berkshire SL6 8YA, United Kingdom Tel: <44> (1628) 585000 Fax: <44> (1628) 778322 Hitachi Asia Pte. Ltd. 16 Collyer Quay #20-00 Hitachi Tower Singapore 049318 Tel: 535-2100 Fax: 535-1533

Hitachi Asia Ltd. Taipei Branch Office 3F, Hung Kuo Building. No.167, Tun-Hwa North Road, Taipei (105) Tel: <886> (2) 2718-3666 Fax: <886> (2) 2718-8180 Hitachi Asia (Hong Kong) Ltd. Group III (Electronic Components) 7/F., North Tower, World Finance Centre, Harbour City, Canton Road, Tsim Sha Tsui, Kowloon, Hong Kong Tel: <852> (2) 735 9218 Fax: <852> (2) 730 0281 Telex: 40815 HITEC HX

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