# Silicon NPN Triple Diffused Horizntal Deflection Output

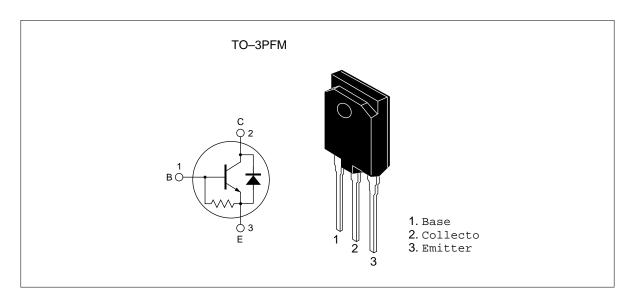
# **HITACHI**

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

### **Features**

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

#### **Outline**



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

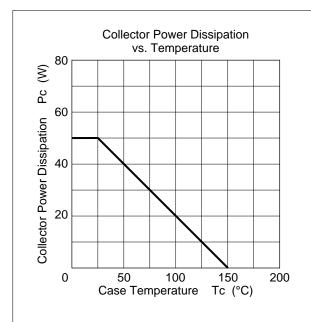
Item	Symbol	Ratings	Unit	
Collector to emitter voltage	V <sub>CES</sub>	1500	V	
Emitter to base voltage	V <sub>EBO</sub>	5	V	
Collector current	I <sub>c</sub>	14	А	
Collector peak current	i <sub>c(peak)</sub>	28	A	
Collector power dissipation	P <sub>C</sub> <sup>Note1</sup>	50	W	
Junction temperature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

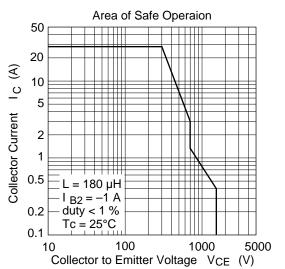
Note: 1. Value at  $Tc = 25^{\circ}C$ 

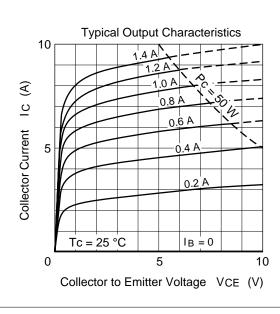
# **Electrical Characteristics** (Ta = 25°C)

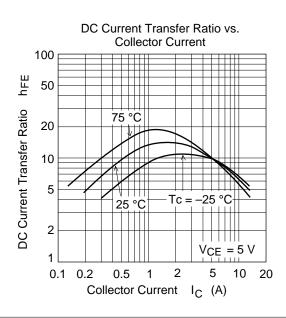
Item	Symbol	Min	Тур	Max	Unit	Test Conditions
Emitter to base breakdown voltage	$V_{(BR)EBO}$	5			V	$I_{\rm E} = 500 {\rm mA}, \ I_{\rm C} = 0$
Collector cutoff current	I <sub>CES</sub>	<del></del>	_	500	μΑ	$V_{CE} = 1500V, R_{BE} = 0$
DC current transfer ratio	h <sub>FE1</sub>	5		25		$V_{CE} = 5 \text{ V}, I_{C} = 1 \text{A}$
DC current transfer ratio	h <sub>FE2</sub>	4	_	7		$V_{CE} = 5 \text{ V}, I_{C} = 10 \text{A}$
Collector to emitter saturation voltage	$V_{\text{CE(sat)}}$	_		5	V	$I_{\rm C} = 10A, I_{\rm B} = 2.5A$
Base to emitter saturation voltage	$V_{BE(sat)}$	<u> </u>		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	$I_{CP} = 7A, I_{B1} = 2.4A$ $f_{H} = 31.5kHz$

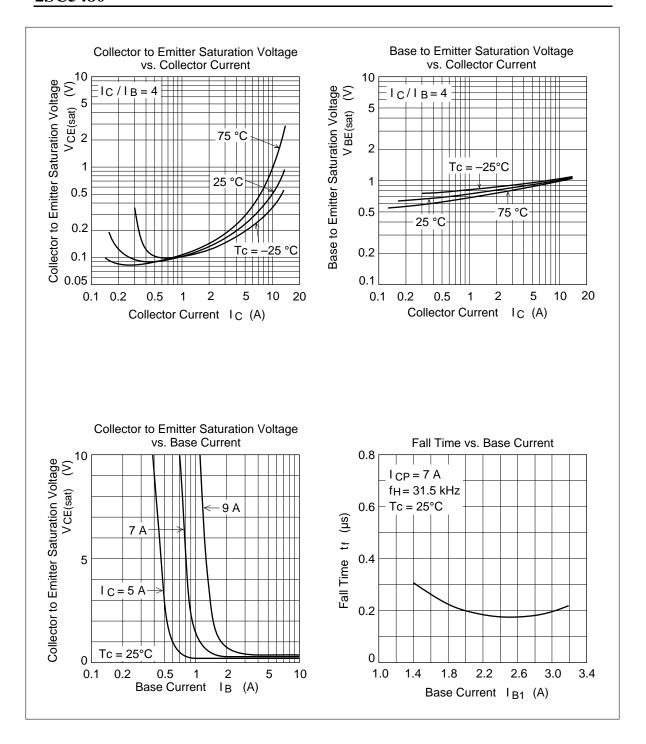
### **Main Characteristics**



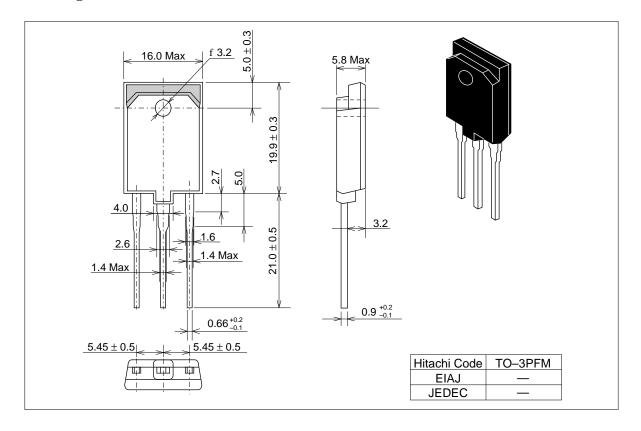








# **Package Dimensions (Unit: mm)**



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