Silicon NPN Triple Diffused

# HITACHI

#### Application

High voltage amplifier

#### Features

• High breakdown voltage  $V_{(BR)CEO} = 1500 \text{ V Min}$ 

#### Outline

TO-220FM		1. Beæ 2. Colleptor 3. Emitter	

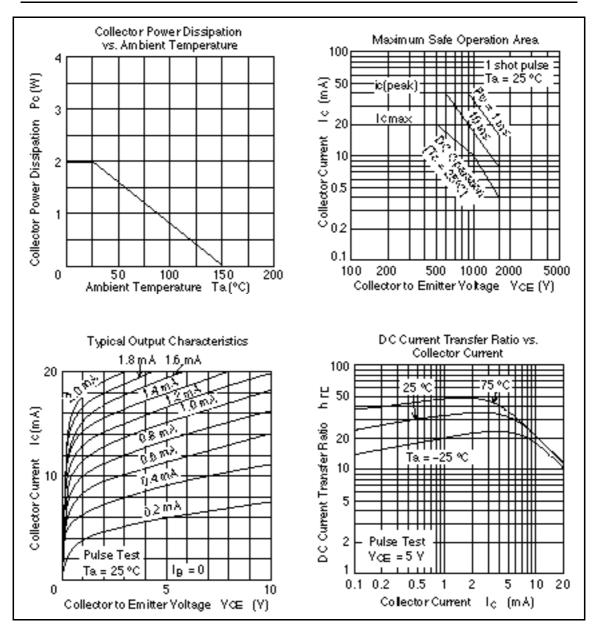


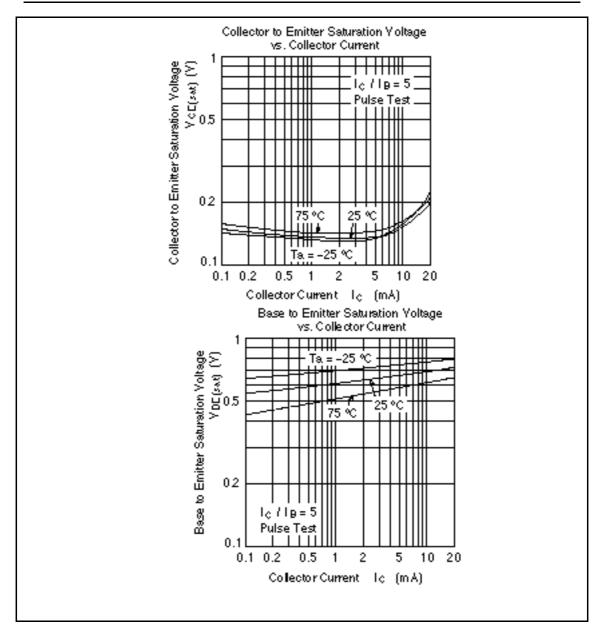
#### **Absolute Maximum Ratings** (Ta = $25^{\circ}$ C)

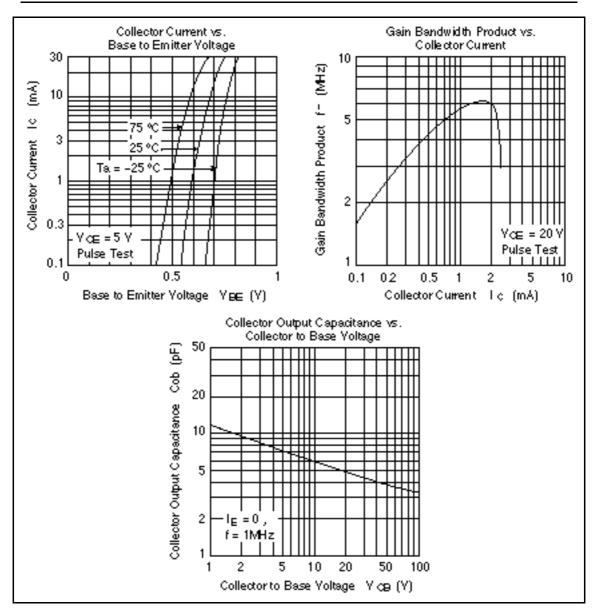
Item	Symbol	Ratings	Unit	
Collector to base voltage	V <sub>CBO</sub>	1500	V	
Collector to emitter voltage	V <sub>CEO</sub>	1500	V	
Emitter to base voltage	V <sub>EBO</sub>	6	V	
Collector current	Ι <sub>c</sub>	20	mA	
Collector peak current	I <sub>C (peak)</sub>	40	mA	
Collector power dissipation	Pc	2	W	
Junction temperature	Tj	150	°C	
Storage temperature	Tstg	-55 to +150	°C	

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

Item	Symbol	Min	Тур	Max	Unit	Test conditions
Collector cutoff current	I <sub>CES</sub>			10	μA	$V_{ce} = 1500 \text{ V}, \text{ R}_{be} = 0$
Collector cutoff current	I <sub>CEO</sub>			100	μA	$V_{ce}$ = 1500 V, $R_{be}$ =
Emitter cutoff current	I <sub>EBO</sub>	_	_	10	μA	$V_{EB} = 6 V, I_{C} = 0$
DC current transfer ratio	$\mathbf{h}_{\text{FE}}$	10	_			$V_{ce}$ = 5 V, $I_c$ = 1 mA
Collector to emitter saturation voltage	$V_{\text{CE (sat)}}$	_		5.0	V	$I_{c} = 10 \text{ mA}, I_{B} = 2 \text{ mA}$







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